DOCUMENT RESUME

ED 051 571 24 EA 003 573

AUTHOR	Marien, Michael D.
TITLE	Alternative Futures for Learning: An Annotated Bibliography of Trends, Forecasts, and Proposals.
INSTITUTION	Syracuse Univ. Research Corp., N.Y. Educational Policy Research Center, Syracuse, N.Y.
SPONS AGENCY	National Center for Educational Research and Development (DHEW/CE), Washington, D.C.
BUREAU NO	BR-7-0996
PUB DATE	71
CONTRACT	OEC-1-7-070996-4253
NOTE	247p.
AVAILABLE FROM	EPRC Publications, 1206 Harrison Street, Syracuse, New York 13210 ($5.00)
EDRS PRICE	EDRS Price MF-$0.65 HC Not Available from EDRS.
DESCRIPTORS	Adult Education, *Annotated Bibliographies, Decision Making, Educational Change, Educational Planning, *Educational Policy, Elementary Education, Higher Education, Indexes (Locaters), *Learning, Literary Criticism, *Prediction, Secondary Education
IDENTIFIERS	*Educational Futures

ABSTRACT

This bibliography of materials relevant to educational policymaking is confined to trends, forecasts, and proposals -- i.e., documents on changes that are taking place, on future states of affairs, and on recommended changes. The material is organized into seven sections: (1) general, (2) elementary and secondary, (3) higher education, (4) other educating institutions, (5) planning and plans, (6) miscellaneous, and (7) addenda. More than 80 percent of the 936 items cited are books or book-length documents. Four indexes are supplied: major author, organization, selected subject, and bibliographic. A related document is ED 047 406. (Author/MLF)

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

alternative futures for learning
alternative futures for learning
alternative futures for learning
alternative futures for learning
alternative futures for learning
alternative futures for learning
alternative futures for learning
alternative futures for learning
alternative futures for learning
alternative futures for learning

ED 1

ED051571

ALTERNATIVE FUTURES FOR LEARNING:
AN ANNOTATED BIBLIOGRAPHY OF TRENDS, FORECASTS, AND PROPOSALS

by

Michael D. Marien

Educational Policy Research Center
(Supported by U. S. Office of Education)
Syracuse University Research Corporation
1206 Harrison Street
Syracuse, New York 13210

ED021241

Documents are available from the Educational Policy Research Center at Syracuse in three formats, besides the regular publication, Notes on the Future of Education:

RESEARCH REPORTS

Reports which have completed review by the EPRC and which deal with specific, policy oriented research. The reports in this series are usually marked by intensive research, either quantified or historical, and address themselves to specific research questions.

EXPLORATORY REPORTS

Reports which, while dealing with policy issues, often approach the realm of conjecture; they address themselves to social issues and the future, may be prescriptive rather than descriptive in tone, and are, by nature, more controversial in their conclusions. The review of these reports by the EPRC is as rigorous as that for Research Reports, though the conclusions remain those of the researcher rather than necessarily representing consensus agreement among the entire Center staff.

WORKING DRAFTS

Working Drafts are papers in progress, and are occasionally made available, in limited supply, to portions of the public to allow critical feedback and review. They have gone through little or no organized review at the Center, and their substance could reflect either of the above two categories of reports.

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL BY MICROFICHE ONLY HAS BEEN GRANTED BY
Syracuse University Research Corp.
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

Copyright © 1971 by Syracuse University Research Corporation, Merrill Lane, University Heights, Syracuse, New York 13210. No part of this publication may be reproduced in any form without the prior written permission of the publisher.

TABLE OF CONTENTS

	Item Number	
	Primary Listing	Addenda
Introduction	Pages i - xix	
I. General		
A. Social Change and Social Goals	1-34	814-818
B. Impacts of Technology	35-42	819-823
C. Manpower Requirements	43-68	824
D. Youth and Youth Culture	69-89	
E. Equality and Social Selection	90-101	825
F. The Knowledge Explosion	102-109	826-827
G. Global Perspectives on Education	109-118	828-837
H. State and National Perspectives	119-128	
I. Multi-Level Perspectives	129-161	838-841
II. Elementary and Secondary		
A. General	162-248	842-860
B. Curriculum	249-267	861-864
C. Governance	268-281	865-869
D. Urban Schools	282-309	870-875
E. Facilities and Technology	310-335	876-877
F. Personnel	336-350	878-880
G. Finance	351-363	881
H. Miscellaneous	364-369	882
III. Higher Education		
A. General	370-433	883-892
B. Governance	434-471	893-904
C. General Curriculum	472-489	905-907
D. Disciplines and Professions	490-528	908-909
E. Graduate Education	529-535	910
F. Distinctive Institutional Types	536-554	911-915
G. Facilities and Technology	555-562	916-917
H. Finance	563-581	918-921
I. Miscellaneous	582-589	
IV. Other Educating Institutions		
A. Pre-School	590-594	922
B. Adult and Continuing Education	595-616	923-927
C. Religious Education	617-622	928
D. Libraries, Print Media, and Museums	623-640	
E. Electronic Media	641-660	

V. Planning and Plans		
A. Forecasting Methodology	661-686	929
B. Planning and Policy-Making	687-725	930-934
C. Planning for Change in Education	726-734	935
D. State-Level Planning and Reports	735-748	
E. Institutional Self-Studies	749-758	
F. Education-Related Organizations	759-765	936
VI. Miscellaneous		
A. Pre-1960 Forecasts	766-793	
B. New and Relevant Periodicals	794-804	
C. Bibliographies (not elsewhere classified)	805-813	
VII. Addenda		
A. General	814-841	
B. Elementary and Secondary	842-882	
C. Higher Education	883-921	
D. Other Educating Institutions	922-928	
E. Planning and Plans	929-936	

INDEXES

A. Index by Major Author	p. 205
B. Index by Organization	p. 212
C. Index by Selected Subject	p. 217
D. Index of Bibliographies	p. 222

ALTERNATIVE FUTURES FOR LEARNING

Foreword

This incomplete bibliography is an attempt to sketch out the range of literature that is relevant to educational policy-making. In the broadest sense, nearly all literature on education could be considered as policy-relevant, but for present purposes this bibliography has been confined to trends, forecasts, and proposals - or documents on changes that are taking place, future states of affairs that may occur, or recommended states of affairs that ought to occur.

The original impetus behind this effort was to document the "futures" literature and to discover how writers have thought and are thinking about the future. However, especially for education, a broad concept of "futures literature" is essential, because many documents use the rhetoric of futures in their titling ("The Future of . . ."; " . . . in the Seventies"; ". . . for the Future"; ". . . in the Year 2000") with little or no substance in the text; other documents seriously deal with possible futures without any such suggestion in their titles. Thus, to rediscover an old truth, one cannot tell a book from its cover. Furthermore, especially in recent years, there is a strong motivation to make recommendations for immediate action; and whether or not the language of futures is invoked, any such proposal for reform is an alternative future.

An ideal of critical annotation has been pursued here which, if well done, is seen as enhancing the value of an item by several times over that of a mere listing. Unfortunately, the ideal has been reached for less than half of the citations, with many of the annotations being non-critical and superficial. Publishers' advertisements have been used in

a number of cases, with the rationale that some information, even if hyperbolic, is better than none at all.

Nevertheless, a multiple-purpose information system is suggested here to be applied to the many purposes of the wide variety of participants who shape educational policy. A forum is also provided for any notion whatsoever - establishment or anti-establishment, technocrat or humanist, radical or conservative - about who should learn what and how. Where feasible, the annotations attempt to relay the most pungent comments and salient conclusions of each author, in his own words if possible. Although considerable work remains to be done, this format also suggests an "idea bank," by listing key concepts in the Index by Selected Subject.

To cope somewhat with information overload, about one-fifth of the items cited here have been recommended. Despite compiler bias, it is felt to be necessary that some attempt be made to separate wheat from chaff. Such an effort should not be taken too seriously, for all of the items have not been judged equally. In nearly every case where a recommendation has been made, the document has been at least looked at, if not read thoroughly. Thus, there are many documents listed here that, if actually looked at, could warrant some kind words. Conversely, there are also many documents that might warrent unkind words. Even if all documents were considered thoroughly at the same moment of time, the distinction between valuable and not-so-valuable is often difficult to make.

For those who are new to the consideration of alternative futures for learning, and therefore at a loss as to where to start, it is strongly recommended that several general books be read first, such as Michael (1), Toffler (2), Ferkiss (9), Mead (71), Coombs (109), and Bakdikian (645). An understanding of the changing societal context

lends a far greater appreciation to the variety of alternative futures for learning that is listed here.

A. Coverage

As indicated at the outset, this bibliography is still incomplete. Aside from the missing or superficial annotations (by the standards employed here), an estimate is warranted of the relevant literature that is not cited at all. General futures literature, or the "Social Foregrounds of Education" is certainly of importance to considering what should be learned. Ideally, education should be for the society in which we live, and, recognizing that our future society will be different from the present, not to mention the past, education should be aimed toward some future state of affairs, no matter how ill-defined. All futures literature is therefore relevant to education, but because of its immense variety, general literature has been limited here to that which makes some explicit mention of education and/or learning (items 1-109). An additional bibliography (806) will attempt a survey of more general futures literatures. Both bibliographies generally exclude science fiction, utopian literature, and contemporary novels set in some future time.

Even the literature on educational futures is far from complete. The major focus is on books and book-length documents (arbitrarily defined as more than 50 pages in length); together comprising 761 of the 936 items cited here, or more than 80% of the total. The coverage of books published by trade and university presses is estimated as fairly complete. However, the "gray literature" - Congressional documents, and reports from research institutes, government agencies and the multitude of interest groups impacting on education - is far from complete, and no estimate of the extant literature could be made. At least an attempt has been made to recognize this literature, some of which is at the forefront of contemporary thinking.

Journal and magazine articles have been included, but there has been no attempt to systematically comb all of the periodical literature, and such an attempt could easily double the length of this bibliography. Many articles are trivial, superficial, or spin-offs from books; to pursue all such literature may be counter-productive. Rather, articles are cited that present ideas and proposals not to be found in books. At a very rough estimate, perhaps 10-30% of all important articles have been covered.

Coverage of documents published outside of the United States is very skimpy, and the few foreign documents cited are largely from England and Canada. However, as pointed out by Coombs (109), there are many common educational problems in our emerging global society, and "Alternative Futures for Learning" should ideally reflect viewpoints from around the world. This bibliography will hopefully stimulate similar attempts at documentation in other countries, eventually leading to a global integration where the best proposals from all nations are made readily available to all who are concerned with the future of learning. As a start in this direction, Hugh Stevenson, at the University of Western Ontario at London, is setting up an educational futures bibliography for Canada.

B. Categorization

The citations are not arranged alphabetically, for such an arrangement is mechanical; the location of authors herein is made possible by the author index. Rather, there has been an attempt at "heuristic juxtaposition," arranging items so that there is some logical flow or clashing contrast - so that a cluster of perhaps a dozen documents can be compared together. Although this has been attempted, there are many cases where there is little or no relationship, and the user is therefore cautioned against reading too much meaning into the arrangements. In several instances, no basis for arrangement has been discovered, and a more or less alphabetized sequence has been resorted to (e.g., items 162-248). Overall,

there are many implicit sub-categories, which are left as such in order to avoid a profusion of labeling.

In general, the arrangement leads from the broad to the narrow. All users should have an interest in Part I, which lists general education-related documents and multi-national and/or multi-level overviews of education. And all users should check the 123 items in the addenda, which are arranged parallel to Parts I-VI (see Table of Contents).

C. Some Observations on the Literature

With the limitations described above, some tentative generalizations can be made as to the quantity and quality of the literature, the major themes and major omissions, and the relationship of educational futures literature to other futures literature.

1. Growing Quantity. Undoubtedly, there is a widespread intuitive sense that the literature on alternative futures for learning is growing rapidly. As one reviewer recently noted in covering four new books at once: "the business of producing such books is threatening to become the very assembly line that students as well as the authors of such books are rebelling against." Indeed, to the degree that the appropriate universe has been roughly represented, the "ball park data" (see next page) lends confirmation to these suspicions. Between 1966 and 1968, the quantity nearly doubled, and it more than doubled between 1968 and 1970.

The growth in the literature on educational futures and reform is especially notable for higher education. Aside from the growth of higher education and the pervasive problems of finance and governance - obvious reasons for generating literature - special note should be made of two major projects. The Carnegie Commission on Higher Education (370) has

sponsored a considerable publications list in the past two years, with far more in the offing. Across the bay in San Francisco, Jossey-Bass Publishers has been rapidly adding new titles to its generally excellent Series in Higher Education.

Table 1. Documents Cited by Date of Publication

	1971	1970	1969	1968	1967	1966	1960-1965	1950-1959	pre-1950	Total
U.S. Books and Book-Length Documents:										
On Education	78	120	93	60	30	34	54	15	16	500
Education-Related	20	72	49	30	14	13	22	4	4	228
Foreign Books	1	8	6	4	7	5	2	-	-	33
Articles	15	27	26	10	11	4	3	1	2	99
Article-Length Reports (under 50 pages)	7	24	9	9	8	3	4	-	1	65
New Periodicals	-	3	2	4	1	1	-	-	-	11
Total	121	254	185	117	71	60	85	20	23	936
% of Total	12.9	27.1	19.8	12.5	7.6	6.4	9.1	2.1	2.5	100%

Exponential increases in the literature of educational reform cannot be expected to continue indefinitely; indeed the increase could level off or even decline at any time, as a result of widespread reforms actually taking place or as a result of reformer despair. Neither event appears too likely, however, and the prospect of heavy R&D funding through the proposed National Institute of Education could generate far more policy-relevant literature than at present.

2. Shifts in Time and Purpose. Men have always attempted to forecast the future in some manner, but the quantity of future-casting has been considerably stepped up in recent years as it is increasingly recognized that our society is undergoing a profound transition. Whether or not one identifies himself as a "Futurist," we nevertheless live in an Age of Extending Horizons where a great number of writers have extended their time focus so that one or more possible future states of society are considered to some degree. Judging from the general lack of cross-citation, it appears that most writers have shifted from a present- to a future-orientation independent of each other; that the transition results from social influences rather than intellectual influences. It is therefore incorrect to claim that the futurist movement has stimulated others to think about the future, although it may have done so indirectly. Rather, the emergence of professional futurists is merely a salient indicator of the general trend in thinking; a centerpiece, rather than a keystone.

This shift in time frame is even more apparent when one considers the trend from the rhetorical use of the future to a genuine sense of the future. Much of the literature cited in the section on Pre-1960 Forecasts (items 766-793) employs "the future" in its titling, without any sense of trends or possible futures. Perhaps the most outrageously misleading title is Education 2000 AD, resulting from a 1956 symposium (206). The titles from symposia still tend to be inflated, e.g., Educating for the Twenty-First Century (393), but individual authors increasingly tend to meet promise with performance. The Future of Public Education (276), published in 1960, proves to be an analysis of power relationships with an advocacy of more teacher power; today, such a title would be expected to deal with broad social trends and the year 2000.

Another trend can be detected: from description to prescription, or from passively analyzing a problem or even an area of inquiry not seen as a problem, to actively proposing remedies or reforms. Although the classification of literature by major intent is extremely subjective,

the rough estimate provided below may nevertheless be of some value.

Table 2. Major Intent of 500 Books and Book-Length Reports on Education

	1971	1970	1969	1968	1967	1966	1960-1965	1950-1959	Pre-1950	Total
Mainly Prescriptive										
General	2	6	7	1	-	1	3	-	2	22
E & S	21	35	23	22	11	6	22	8	6	154
Higher Education	24	29	31	10	3	9	8	2	2	118
Adult Education, etc.	2	4	4	1	-	-	2	-	-	13
Sub-Total	49	74	65	34	14	16	35	10	10	307
Mainly Non-Prescriptive*										
General	3	3	3	-	3	1	2	1	1	17
E & S	5	3	7	12	8	9	7	1	2	54
Higher Education	8	11	10	9	5	7	8	3	3	64
Adult Education, etc.	1	2	2	2	-	1	1	-	-	9
Sub-Total	17	19	22	23	16	18	18	5	6	144
On Governance										
E & S	1	9	2	1	-	-	1	-	-	14
Higher Education	11	18	4	2	-	-	-	-	-	35
Total	78	120	93	60	30	34	54	15	16	500
% of Total	15.6	24.0	18.6	12.0	6.0	6.8	10.8	3.0	3.2	100.0%

* Trends, Descriptive Forecasts, and Analyses

As an example of this shift, Ronald Gross and Judith Murphy edited The Revolution in the Schools in 1964 (195), falsely proclaiming changes that had occurred or appeared to be occurring. In 1969, Ronald and Beatrice Gross edited Radical School Reform (196), suggesting thorough-going changes that ought to occur, in line with many others who have found that small and isolated "band-aid" changes are inadequate, even if they are effected.

3. The Major Theme: From Closed Teaching Systems to Open Learning Systems. To broadly summarize the literature, there is a basic, long-term multifold trend from closed teaching systems to open learning systems. The chart on the following page summarizes the many elements of this trend by distilling empirical trend analysis, criticisms, forecasts, and proposed future states for all levels of education. There are many ways in which this basic trend is promulgated. At lower levels, "informal education" is presently the fashionable title, as popularized by Silberman's Crisis in the Classroom (243). At higher levels, education for human development is the key term. Overall, there is a fundamental transition from considering teaching and other inputs into the educative process to the consideration of learning outcomes. Thus the title of this bibliography, in line with the shift in attention from institutions to individuals, emphasizes "Alternative Futures for Learning," rather than "Alternative Futures for Education." Whether or not educating institutions are involved, the new concern is focused on learning wherever it occurs. This spirit is notably embodied by the recently established Commission on Non-Traditional Study (923).

In one respect, only one alternative to the present is suggested by the literature. But there are many variations to this single basic theme, reflecting the complex pluralism that will surely characterize our future education that seeks to satisfy multiple needs and multiple ideologies Moreover, the traditional closed teaching systems remain as a most probable future for many Americans, whether desired or not. Yet, in all of the documents cited here, there is not a single one that defends the present system. Stated conversely, everyone advocates some degree of change and

C10449

THE BASIC LONG-TERM MULTIFOLD TREND IN EDUCATION

	CLOSED TEACHING SYSTEMS	OPEN LEARNING SYSTEMS
ALTERNATE TITLES	Teacher and/or institution centered Tight system; Rational mechanics; Cause-effect paradigm Control-centered	Student and/or child centered Loose system Learning-centered; Inquiry approach; Developmental; Discovery education
SOCIETAL CONTEXT	Agricultural; Industrial Autocratic; Plutocratic; Gerontocratic Static and simple	Postindustrial; Knowledge-based, Service society Democratic; Meritocratic; Self-renewing Dynamic and complex
BELIEFS ABOUT LEARNING	Teaching results in learning Learning requires discipline, work, drill, memorization, pain, control Teacher as source of knowledge, student as passive absorber Capability confined to a few; the genius, the gifted	Good teaching aids learning, bad teaching inhibits it Learning is enjoyable, follows from pursuit of interests Learning from many sources, including peers; student as active participant Extensive latent potential in all
ADMINISTRATION	Input oriented Hierarchical leadership	Input-Service-Benefit oriented, PPBS Pluralistic, participatory
CURRICULUM	Narrow, fixed, retrospective Classics, Principles, Truth, facts, deduction, Maxims Determined by teacher and/or extra-classroom authority Programmatic, sequential; Lesson plans strictly followed Group study prescribed for all students Western culture as superior to primitives, heathens, Noble Savages, and the underdeveloped; Us - Them: emphasis on differences	Broad, changing present and future-oriented Methods, principles, induction, creativity, intuition, randomness Determined by teacher and/or student Interchangable programettes, Modular learning; Lesson plan as guide to options Independent study designed to fit individual needs and interests Humanistic, pan-cultural; Us: emphasis on similarities
STUDENT-TEACHER RELATIONS	Students are a collectivity Teacher as Authority, student as follower; control as instrumental technique Feeling Withheld; I - It Single Teacher	Compensatory education for exceptional children, the physically and linguistically handicapped, the underprivileged Professional as Learning Facilitator or Senior Learner; student as junior colleague Feelings exposed and respected, student evaluation of teachers; I - Thou Multi-adult exposure, team teaching, guests, differentiated staffing
STUDENT CONDUCT	Compulsory attendance: no choice of institution Physical punishment for "Misbehavior" No student recourse for injustice Dropping out is fault of student; shaming for ignorance Established rules and routines	Optional participation: alternatives offered Counseling for personal difficulties Ombudsman, legal measures Many possible sources of failure: environmental, institutional and individual Democratic development of rules and routines as necessary
FEEDBACK	Formal, mechanistic, "Right" answers Strong reliance on quantitative measures	Multi-faceted, formal and informal, open-ended Use of quantitative measures as necessary
REWARDS	Grades, fixed proportion of failures, class rankings, honors, medals, degrees Recognition through competition in a few areas of excellence Learning has vocational and social utility	Pass-fail, non-grading Deemphasis of competition, promotion of diversity and many areas of excellence; a taste of success for all Rewards of learning are inherent
GOALS	Socialization, training, moral education, passing on civilization, knowing; education of intellect only Getting an Education, being educated, terminal education	Development of whole individual, investigation of cultural heritage, questioning Learning how to learn, lifelong learning, education as a beginning
EXTRA-CLASSROOM ENVIRONMENT	Restrictive, "In Loco Parentis" Physical and intellectual separation from world	Permissive, largely peer controlled Interlinkage of school and life, "School Without Walls"
SPACE	"Grid" architecture, stationary furniture Arbitrarily assigned seats Teaching in classrooms Specially designated learning institutions, outside learning ignored	Omnidirectional space and flexible furnishings, choice of environments Student freedom to choose seats Learning in classrooms, learning resource center, home, dormitory, community, world Recognition and encouragement of formal and informal learning opportunities throughout society, equivalent credit for outside learning
TIME	Collective pace Ordered structure of class hours and course credits Uninterrupted schooling, followed by uninterrupted work	Individual pace Flexible scheduling Learning and work interspersed throughout lifetime; learning a living

NOTE: This is a distillation of present trends, criticisms, forecasts, and prescriptive future states at all levels of education. To enable a cogent overview, there is a necessary abstration and simplification. Open Learning Systems, however, should not be confused with situations that are purely chaotic, anarchistic, and unstructured.

MICHAEL MARIEN, WORK DRAFT, REVISED APRIL 1970
EDUCATIONAL POLICY RESEARCH CENTER, SYRACUSE UNIVERSITY RESEARCH CORPORATION

nearly all of the advocacy is for open systems. Yet the traditional practices persist, as discovered by the all-too-few examples of somber empiricism such as Goodlad (188), Oettinger (321), Dressel and Delisle (472), and Ladd (750). The humanistic revolution that has been "described," forecasted, and advocated, has yet to take place. But will it?

An optimistic forecaster would look at the unprecedented outpouring of reformist literature, and argue that it will only require a few years for the literature to flow outwards to legislators and other officials and to teachers, parents, and students. Unlike the false or premature proclamations earlier in this century by a small group of "Progressives" (items 767-770), the optimist would interpret the widespread literature of reform issuing from a wide variety of individual writers, invisible colleges, commissions and interest groups as a harbinger of a real revolution in education and learning.

But the pessimist would reply that, despite this swollen body of literature, the traditional system will still persist. It could be argued that there is a considerable duplication in the literature, with its advocacy of community control, student participation, abandoning grades, more relevant studies, and less bureaucracy - and, as elsewhere, the literature of reform is read by those who are already convinced. Moreover, in order to promote their professional status, academics generally address their message to other academics. Only three books in this bibliography are written by teachers and specifically addressed to students (items 440, 522, and 869). Only one book, by a parent, is explicitly for parents (275). The pessimist would argue that the literature of alternative futures for learning aptly demonstrates the impotence of liberal intellectuals to communicate with those who hold traditional values. Many books are promoted by their publishers as "arousing a storm of controversy," whereas a more realistic assessment might only find a ripple of interest in a few localities.

Nevertheless, even the pessimist - unless totally overcome by ideological beliefs that the system never changes - can find evidence that some change has occurred in the direction of open learning systems. The problem, as elsewhere, is that rising needs and expectations are rapidly outdistancing actual changes.

4. The Major Omission: Adult Education. There is a major omission in this body of literature concerned with alternative futures for learning. Whereas, there are 222 books devoted to elementary and secondary education, and 217 books devoted to higher education (Table 2), and several hundred others than are related in some way to these age-graded institutions, there are only 22 documents that are primarily focused on adult and continuing education. Of these, virtually all have been published by low-visibility institutes and centers. In recent years, not a single book primarily devoted to adult learning has been published and widely promoted by a major trade publisher.

There are several obvious explanations for this neglect. First, education has traditionally been considered as an activity involving only the young, and the young and their learning needs are obviously still with us. Secondly, the institutional context that supports literature on education and educational futures is explicitly dedicated to servicing either elementary/secondary or higher education. The two levels are almost completely segregated intellectually. Of the few volumes taking a multi-level perspective (items 129-161) several are probably miscategorized because the real content is not known.

Thirdly, adult education has traditionally been a low-status subject of inquiry, especially because it has been traditionally associated with vocational education. Fourthly, adult education is generally a voluntary self-financing activity, or it is privately sponsored. It is not of direct public concern that a corporation cannot afford to continue its training

school, or that individuals cannot find funds to attend proprietary schools. Moreover, there are no viable student revolts in the classrooms of the military or the Great Books discussion groups - formally organized learning activities that get little attention in any event. Finally, the realm of adult or peripheral education is so diverse and fragmented that it is difficult to conceptualize, adding to the fact that there is very little data to support any conceptualization.

Yet, according to Moses (598), the periphery of corporate and military schools, proprietary schools, correspondence schools, anti-poverty programs, television courses, and other adult activities of churches, unions, colleges, clubs, etc., has been growing at a faster rate than core education, and on a head count basis, there are probably more adults enrolled in the periphery than in the core. By 1976, Moses estimates that enrollment in the periphery may be 55% of the total "Learning Force," comprising all individuals participating in formally organized learning activities.

The data alone suggest that far more attention should be given in the literature to adult learning. The hopeful reformers of K-12 and higher education consistently reiterate that our emerging knowledge-based and dynamic society demands a lifetime of learning, and that children should be taught how to learn rather than gorged with "facts" that may be obsolete or irrelevant. But this is a long-range investment, and if we are to survive as a society over the next few decades, more attention must be paid to the agencies that facilitate adult learning.

And there is a far more important justification for considering alternative futures for adult learning. It is a fundamental but neglected fact that schools reflect their surrounding communities and cannot be expected to rise too far above them by any standard of intellect or human development. To bring about a desirable future for schools and colleges requires adult education. Parents, teachers, administrators, professors, legislators, and voters must all acquire new skills, concepts and values to

reflect new social and technological realities. The failure of the vast reform literature cited here, if indeed it does fail, will be a failure of adult education - a failure of hundreds of putative teachers to convincingly communicate their vision of what education can and ought to be, as a result of what is happening to our future-shocked world.

In addition to problems of communication, there are problems of adult capacity. Education is traditionally seen as an activity where the old pass on their wisdom to the young. But in a rapidly changing society, many of the skills, concepts, and values of the old are outdated. As Margaret Mead (71) has been saying for a number of years, we are all like immigrants. While we retain the mechanisms for socializing the young, we do not have mechanisms for socializing the old. Furthermore, the old are not expected to learn. We still retain the traditional concept of "getting an education" through attending school, after which it is presumed that one is sufficiently educated. We encourage the young to learn (in terms established by the old), we test the young extensively for their knowledge, and we worry that their education is not adequate. There is no corresponding worry for post-school populations. One man's opinion is as good as another man's, just as one man's vote equals another's. Differences are attributed to values and beliefs, rather than knowledge. What individuals actually know - relative to what a reasonably informed worker, citizen, and parent should know - is seldom a subject of inquiry for social scientists, and educators are only concerned with what the young should know. The National Assessment of Educational Progress (936), although an important beginning, does not yet measure the knowledge of adults over 35.

Many adults continue to learn - perhaps far more than we recognize, according to the studies conducted by Tough (599). It will be increasingly important to find ways to help adults learn, not only to appreciate the necessity for changing the education of the young to fit contemporary and forecasted needs, but also to enable the old to keep up with the young.

The adult drop-out problem, as described by Gardner (20), may be a far more serious problem than that of the young high school drop-out.

5. Educational Futures Literature and General Futures Literature. A final observation is offered regarding the relationship of educational futures literature to all other futures literature. In the broadest sense, all futures literature is relevant to education, not only because it is educational but also because the descriptions and prescriptions for future population levels, environments, the polity, the economy, and the family, suggest the society that we are educating for at present, and in which education will be taking place in the future. Needless to say, virtually every writer on the future envisions a state of affairs different from the present, reinforcing the widespread view that much of what is learned today will not be relevant in the future. Futures studies will, of necessity, become an important part of any curriculum (items 516, 517, 777), although the spread of such trans-disciplinary inquiry is seriously inhibited by the traditional organization of knowledge.

As a very rough approximation, the literature of educational futures (as broadly defined here) appears to comprise about one-third of all futures literature. Under a more stringent definition, confined to forecasts and proposals for reform based on the consideration of some future state of society, educational futures literature would of course comprise a much smaller proportion of the total.

There are several reasons for the great attention paid to education. First, education is the most dominant activity in our society, costing even more than the military when expenditures for all educating institutions are considered. Secondly, the points of decision-making are highly diffused, with elected and appointed officials, administrators, teachers, parents, students, suppliers,and a wide variety of interest groups all serving to influence the formation of different policies to varying degrees.

Thus, there are many messages aimed at many audiences, as opposed to transportation policy or foreign policy which are formulated by a relatively small number of persons. Thirdly, education is a "soft" activity, controversial, difficult to define and measure, and quite variegated when broadly defined, for learning is a necessary input to every social activity.

Finally, everyone has had extensive experience with formal education and there are consequently many experts. Whereas we defer to authority in fields of health, religion, and technology, many individuals hold strong beliefs about education, whether or not well-founded. Especially in higher education, every faculty member considers himself knowledgeable in education, as well as his academic specialty. Thus when crisis hits the campus, creating an uncertain future which is ripe for invention, there are many potential experts to provide solutions. In addition to individual views, policy-relevant literature in higher education is generated, for example, by various commissions, the American Council on Education and its constituent associations, the College Entrance Examination Board, and the National Student Association. Consequently, there is considerable duplication in this literature.

Hopefully, this bibliography, or some such document, can shorten dissemination lags and duplication, enabling the examination and creation of alternative futures for learning which build on the work of others (as scholarship has always done), rather than continually rediscovering contemporary fashions in thinking.

D. Recommendations for Further Work

This bibliography is not only incomplete, but, as indicated in Table 1, it is subject to rapid obsolescence. Indeed, the most significant literature on alternative futures for learning is probably in typewriter carriages

and galley proofs. If the reader has found this compilation to be of value, he can readily appreciate the need for a comprehensive, trans-disciplinary, global information system for educational policy-makers that can drastically cut dissemination lags, as well as anticipate many forthcoming publications. Such an investment would certainly repay itself many times over in the upgraded quality of consequent research and decision-making.

In addition to elaborating the present line of work, there is much to be done in the way of integrating the extant literature. The documents arrayed here in categories such as manpower requirements, youth and youth culture, urban schools, disciplines and professions, and finance, could very well be subjected to overview studies that point out similarities and differences. A history of 20th century educational forecasting, utilizing pre-1960 or pre-1965 documents, would be an invaluable aide to recognizing how forecasters in the past have been reasonably accurate or egregiously wrong. The ratio of pontificators to integrators is far too lopsided, and it is hoped that there will be many more overviews in the future, such as Mayhew on the literature of higher education (809), Bakdikian on the media (645), and Ladd on institutional self-studies (750).

In addition to annotations and overviews, there is also a need for literature that is popularized on various levels for various audiences. Silberman's Crisis in the Classroom (243), for example, could be reduced from its 542 pages (which sells well among the literate book-reading public) to a 100 page paperback with photographs and diagrams that clearly illustrate the advantages of informal education. Such popularizations (also utilizing other media) will not necessarily reach every citizen or be accepted, but they should at least be available for those who are interested. Multi-level knowledge (similar to the three editions of the U.S. Government Budget) will hopefully become more widespread in the future. At present, we are far from a comprehensive system of knowledge dissemination.

E. Annotated Bibliography as a Forecasting Method

Among professional futurists, the Delphi method is a fashionable procedure for exploring the future. There is, of course, considerable value to a succession of questionnaires being answered by an anonymous panel of experts - perhaps the greatest advantage being the simultaneous expression of opinion on any single event or trend.

But there are also several distinct advantages of annotated bibliography. Whereas the participants in a Delphi panel are selected by the conductor of the exercise, and further selected by their willingness to participate, the "participants" in a bibliography include all those who have put their notions of alternative futures into print. (However, one advantage of the Delphi is to select those experts who may have work-in-progress, or who have not written extensively). Moreover, there are no leading questions. Thus a widespread duplication of viewpoint (as in the basic, long-term multifold trend in education), indicates a genuine, rather than a forced consensus. An annotated bibliography is, after all, a collective portrait of our images of the future, which, as Polak indicates (664), will serve to determine our future.

Ideally, an annotated bibliography will be used in conjunction with the Delphi and other forecasting methods. For the Delphi, it is not only a source for generating questions, but a guide to selecting participants. Differences in the literature might be resolved or highlighted, not only by integrative overviews, but by bringing all those who have written about youth and youth culture, for example, to serve as a Delphi panel. Those not willing to participate could nevertheless be cited, especially if they hold radically divergent views.

F. Acknowledgments

Several major sources of information should be credited. I have benefited from the listings of new publications in The New York Times, The Chronicle of Higher Education, Science, Saturday Review, and Subject Guide to Forthcoming Books. Considerable help has been added through the library of the Educational Policy Research Center at Syracuse and the associated services of Mary E. O'Neill, the bibliographic work of Billy Rojas (808), and the bookshelves of my colleagues at EPRC which have been available for my inspection.

I am also indebted to editorial comments by Donnelly J. Barclay, and, above all, I wish to express my deep appreciation for the dedicated and exemplary work of Aina Sanders in preparing the manuscript.

ALTERNATIVE FUTURES FOR LEARNING:
AN ANNOTATED BIBLIOGRAPHY OF TRENDS, FORECASTS, AND PROPOSALS

I. General

A. Social Change and Social Goals

1. MICHAEL, Donald N. The Unprepared Society: Planning for a Precarious Future. Foreword by Ward Madden. The John Dewey Society Lecture--No. Ten. N.Y.: Basic Books, 1968. 132 pp. $4.95.

   An excellent introduction explaining the need for looking at the future--who does it, how it is done, and problems encountered. The final chapter, "Some Challenges for Educators," discusses implications for education, e.g.: "We must educate so people can cope efficiently, imaginatively, and perceptively with information overload." (p. 108) RECOMMENDED

2. TOFFLER, Alvin. Future Shock. N.Y.: Random House, 1970. 505 pp. $8.95. Bib., pp. 461-483.

   "Future shock" is the disease of change, "the dizzying disorientation brought on by the premature arrival of the future . . . culture shock in one's own society . . . the malaise, mass neurosis, irrationality, and free-floating violence already apparent in contemporary life are merely a foretaste of what may lie ahead unless we come to understand and treat this disease." (p. 13)

   The sources come from increasing transience, novelty, and diversity. Transience involves the throw-away society, the new nomads (or the declining significance of place to human life), modular man (who has modular relationships with many, rather than holistic relationships with a few), the coming post-bureaucratic ad-hocracy, and the obsolescence of information. The novelty ratio (between the familiar and the unfamiliar) is growing, and, with the aid of science, an economy geared to the provision of psychic gratification and incorporating new family relationships is becoming increasingly dominant. Diversity has led us to overchoice, a surfeit of subcults in the world of work and play, and a diversity of life styles enabling serial selves. This accelerating pace leads to serious physiological problems, and inappropriate psychological responses such as denial, specialism, obsessive reversion (both right-wing and left-wing) and super-simplifying.

   Numerous strategies for survival are proposed for individuals (personal stability zones, crisis counseling, half-way houses, enclaves of the past, and enclaves of the future), technological control, social futurism (including comments on the collapse of technocratic planning and the need for social futures assemblies to salvage the system of representative politics) and education, which is seen as "a hopeless

anachronism." Although education is admittedly undergoing rapid change, "much of this change is no more than an attempt to refine the existent machinery, making it ever more efficient in the pursuit of obsolete goals." (p. 359) Toffler advocates a Council of the Future in every school and community, provision for lifelong education, and developing common skills of learning, relating, and choosing, while extending superindustrial diversity.

This challenging overview at times appears glib, especially with its zippy chapter headings and subheadings. It is written for a broad audience, but backed by considerable research, including a bibliography of 359 items. And it raises some very important questions. RECOMMENDED

3. DRUCKER, Peter F. The Age of Discontinuity: Guidelines to Our Changing Society. N.Y.: Harper & Row, 1969.

An important book focusing on four major discontinuities: new technologies, the world economy (including a chapter on "The Global Shopping Center"), a society of large organizations (including a chapter on "The New Pluralism"), and the changed position and power of knowledge such that we are becoming a knowledge society--"the greatest of the discontinuities around us." This final section on knowledge (Chapters 12-17) is of immense importance to educators.

Drucker forecasts that the knowledge industries will account for one-half of the total national product in the late 1970's (p. 263), and argues that knowledge, rather than agriculture and mining, has now become the primary industry supplying the essential and central resource of production. Under these circumstances, "It is not that we cannot afford the high costs of education; we cannot afford its low productivity," (p. 334) and economic necessity will therefore force a revolution. "In a knowledge society, school and life can no longer be separate." (p. 324) The diploma curtain is seen as a problem, as is the prolongation of adolescence by the schools and the inherent conflict between extended schooling and continuing education.

Because of our knowledge needs, "We face an unprecedented situation in which we will have to set priorities for new knowledge," (p. 365) and the existing disciplines will not remain appropriate for long, if knowledge is to have a future. RECOMMENDED

4. BENNIS, Warren G. and Philip E. SLATER. The Temporary Society. N.Y.: Harper & Row, 1968. 147 pp.

Six separate essays by one or both of the authors "to force into view certain changes affecting vital aspects of our key institutions: organizational life, family life, interpersonal relationships, and authority." In the first essay, democracy is seen as inevitable--the necessary social system of the electronic era. In the second essay, Slater looks at change and the democratic family, noting that "experimental

chasms between age cohorts serve to invalidate parental authority." (p. 24) The topics that follow concern the new style organizations beyond bureaucracy, social consequences of temporary systems, and new patterns of leadership for adaptive organizations. In the final chapter on the temporary society, the necessary education is prescribed for the art and science of being more fully human: how to get love, to love and to lose love; how to enter groups and leave them; how to attain satisfying roles; and how to cope more readily with ambiguity. "For the most part we learn the significant things informally and badly, having to unlearn them later on in life when the consequences are grave and frightfully expensive, like a five-day-a-week analysis." (p. 127) RECOMMENDED

5. LUNDBERG, Ferdinand. The Coming World Transformation. Garden City, N.Y.: Doubleday, 1963. 395 pp.

A broad and sophisticated assessment of basic social trends, in many instances seen within the span of the next 150 years. The second chapter provides a good history of future study, and the third chapter discusses various aspects "toward a general theory of social prediction." Major attention is given to population, economics, government, and education, with the final chapter paying briefer attention to the prospects of marriage and the family, the city, recreation, religion, medicine, the sciences, the judiciary, and the future of prognostics (which is seen as practically certain to become a regular university discipline).

The most noteworthy attribute of this overview is the major attention that is paid to learning needs and brainpower as a matter of national survival, so much that a meritocracy is seen, with the 21st century as "the era of the savant," and continuing adult higher education for the elite as the largest segment of the educating system. This "entirely new mentally different governing class" will be selected by IQ (a measure that is disputed at present). "The New Upper Labor Force" (pp. 256-264) discusses trends in various specialties.

Western government will become a gigantic social service institution, and in the U.S., government will be completely centered in the national capital. "The pressure of overpopulation against resources in the backward countries makes it certain that the prospects for the spread of liberal government in the world are extremely dark." (p. 119) RECOMMENDED

6. CHASE, Stewart. The Most Probable World. N.Y.: Harper & Row, 1968. 239 pp.

A popular overview considering the consequences of technological change. The final chapter, "No Path But Knowledge," outlines a desirable curriculum for the education of future leaders, and proposes a supranational agency "to evaluate and screen the consequences of large technological innovations before they go into mass production, seriously to affect the culture." (p. 209)

7. GOODMAN, Paul. New Reformation: Notes of a Neolithic Conservative. N.Y.: Random House, 1970. 208 pp. $5.95.

"My subject is the breakdown of belief, and the emergence of new belief, in sciences and professions, education, and civil legitimacy . . . By 'Reformation' I mean simply an upheaval of belief that is of religious depth . . . The crisis of legitimacy is deeper than political revolution; it is what I have here been calling religious: the young have ceased to 'believe' in something, and the disbelief occurs at progressively earlier years." (pp. x-xi, 127)

Although "rather sour on the American young," Goodman has even stronger words (as usual) on the school system, which is seen as "manned by the biggest horde of monks since the time of Henry VIII." (p. 21) The widening wisdom of the times--that children must learn to learn--"usually means picking up the structure of behavior of the teachers and becoming expert in the academic process. In actual practice, young discoverers are bound to discover what will get them past the College Board examinations." (p. 78)

"By and large, though not for all topics and all persons, the incidental process of education suits the nature of learning better than formal teaching." (p. 69) Accordingly, Goodman's suggested "Reformation" of education includes incidental education as the chief means of learning and teaching, eliminating most high schools, college training following entry into the professions, and delaying socialization to protect children's free growth. "Our aim should be to multiply the paths of growing up, instead of narrowing the one existing school path." (p. 87) For ages 6-11, a system of radically decentralized tiny schools is proposed, each with 28 children and 4 teachers (a licensed teacher, a college senior, a literate housewife and mother, and an intelligent high school graduate or dropout). Due to savings of top-down administration, special services, and construction, it is estimated that the costs would be 25% of present urban school costs. (p. 99) (Perhaps this is overstated, but such a scheme may yet be tried by the financially desperate cities.) RECOMMENDED

8. KOSTELANETZ, Richard (ed.). Beyond Left and Right: Radical Thought for Our Time. N.Y.: William Morrow, 1968. 436 pp. $7.95.

An excellent anthology that defines "radical" in the innovative sense, rather than the political sense. A good instruction to futures is provided through a provocative selection of articles by Boulding, Fuller, Kahn, Wiener, McLuhan, Bell, and others, as grouped in the categories of man and his future, technology and society, enterprise and remuneration, architecture, people and resources, education, defense, and redesigning society. RECOMMENDED

9. FERKISS, Victor C. Technological Man: The Myth and the Reality. N.Y.: George Braziller, 1969. 352 pp. Bib., pp. 295-327.

(cont'd)

A political scientist looks at the vast changes transforming society, and attacks the "myth of the future," which focuses on what is to come rather than what is. (pp. 10-16)

He concludes that "Technological man is more myth than reality . . . Bourgeous man is still in the saddle . . . At the same time, an existential revolution is underway that may destroy the identity of the human race, make society unmanageable and render the planet literally uninhabitable. Bourgeous man is incapable of coping with this revolution. The race's only salvation is in the creation of technological man." (p. 245) To survive, a new philosophy is required, involving the new naturalism, the new holism, and the new immanentism. (p. 252)

Chapter 4, "The Prophets of the New" provides an excellent critique of prominent writers such as Ellul, McLuhan, Teilhard de Chardin, Skinner, Landers, and Marx. The unannotated bibliography lists about 500 books and 400 articles on technology, social change, and the future. RECOMMENDED

10. CARROLL, James D. "Noetic Authority," Public Administration Review. 29:5. September-October, 1969. pp. 492-500.

"This paper suggests that the state is withering away in a psychological sense because of an increase in awareness in contemporary society and a growing questioning of authority. It also suggests the state is withering in a technological sense because of a failure to use organized knowledge to satisfy expectations and values. It then suggests that a new form of the state, the 'innovative state' characterized by a new form of authority, may in time emerge." (Abstract) "Noetic" refers to "the increase in awareness--consciousness--of man's social and physical environment that is occurring throughout much of the world." (p. 492) Noetic politics is the politics of knowledge and awareness in an increasingly complex society that is shifting to a mental base of operations and a collegial form of authority. The implications for educating institutions are not discussed, but are obviously profound. RECOMMENDED

11. ZIJDERVELD, Anton C. The Abstract Society: A Cultural Analysis of Our Time. Garden City: Doubleday, 1970. 198 pp. $5.95.

Discusses modern society and the protest against it by gnosticists, anarchists, and activists.

12. PLATT, John. "What We Must Do," Science, 166: November 28, 1969; pp. 1115-1121.

A concise and powerful overview of the multiple crises that we are confronting, with the view that "it has now become urgent for us to mobilize all our intelligence to solve these problems if we are to keep from killing ourselves in the next few years." Two overview charts are provided (for the U.S. and the World), indicating the

priority of problem areas and the estimated time to crisis, broken down in three future periods (1-5 years, 5-20 years, and 20-50 years). For the U.S. the problem areas, in order of priority are total annihilation, great destruction or change (physical, biological, or political), widespread almost unbearable tension (slums, race conflict), large-scale distress (transporation, urban blight, crime), tension producing responsive change (water supply, privacy, drugs, marine resources), other problems important but adequately researched (military R & D, new educational methods), exaggerated dangers and hopes (mind control, heart transplants), and noncrisis problems being overstudied (man in space and most basic science). It is concluded that "The task is clear. The task is huge. The time is horribly short. In the past, we have had science for intellectual pleasure, and science for the control of nature. We have had science for war. But today, the whole human experiment may hang on the question of how fast we now press the development of science for survival."

Although this is one man's list of priorities, it is critically important that more thinking be generated along these lines. Although education is not directly mentioned in this article, the implications should be obvious. **RECOMMENDED**

13. PLATT, John R. The Step to Man. N.Y.: Wiley, 1966. 216 pp.

Thoughtful essays by a biophysicist on the evolving nature of man. See especially Chapter 1 "Where Will the Books Go?" in which microlibraries are forecast as "a familiar system within everyone's reach . . . a memory and the beginnings of a universal brain for the whole human race." In the title essay, it is argued that change cannot continue at the present rates, that many areas are already "past the middle of the S curve," and that we are in the middle of a "unique transitional crisis . . . as we make the jump from an undeveloped scientific and technological society to a fully developed one." (p. 187)

14. Educational Policy Research Center at Stanford. Alternative Futures and Educational Policy. Menlo Park, Calif.: Stanford Research Institute, EPRC Memorandum Report, January 1970. 43 pp.

Tentatively summarizes the findings of a preliminary set of alternative future histories prepared at EPRC/Stanford, and suggests implications for educational policy. Of some two score future histories (ranging from Manifest Destiny and Exuberant Democracy to Authoritarian Recession, "1984" Theocracy, and Collapse) "there are very few which manage to avoid one or another kind of time of serious troubles between now and 2050. The few that do require a dramatic shift of values and perceptions with regard to what we came to term the 'world macroproblem.' This macroproblem will be the predominant concern of the foreseeable future, for all the alternative paths. It is the composite of all the problems which have been brought about by a combination of rampant technology application and industrial development together with high population levels." (p. 6)

"The overall message is clear. It is not yet time to redesign education for ecstatic individuals in a carefree world. To the extent that one believes that the analysis of the roots of the 'world macroproblem' holds up, to that extent he will believe that the paramount educational task for the developed world is the radical altering of the dominant basic premises, perceptions, images, and values of the culture and that the paramount task for the nation is the development of a sense of purpose and unity. To that extent, also, it will seem essential that we re-examine all our present educational institutions, practices, and commitments to determine how their priority is altered in view of these future outlooks." (p. 42) RECOMMENDED

15. FULLER, R. Buckminster. Operating Manual for Spaceship Earth. Carbondale: Southern Illinois University Press, March 1969. 143 pp. $4.25; N.Y.: Pocket Books, November 1970. 127 pp. $1.25.

Cryptic, audacious, brilliantly simple, (or simplistically naive?), this short piece of "long-distance thinking" is hardly an "operating manual" but possibly a preface to one. Fuller is against nations and politicians, ignorance-invented race distinctions, established ideologies that assume material scarcity, and academic specialization that may hasten our extinction. Rather, "A new, physically uncompromised, metaphysical initiative of unbiased integrity could unify the world." (p. 32) This will come about by the computer replacing man as a specialist, with man "being forced to reestablish, employ, and enjoy his innate 'comprehensivity.'" (p. 40) Those who are consequently unemployed will be given "a life fellowship in research and development or in just simple thinking." Once problems are approached on a universal general systems basis, the resulting world industrialization will benefit all of humanity. "This all brings us to a realization of the enormous educational task which must be successfully accomplished right now in a hurry . . ." (p. 113) Indeed.

16. THEOBALD, Robert (ed.). An Alternative Future for America II. Revised and Enlarged Edition. Chicago: Swallow, May 1970. 199 pp. $6.00; paper, $2.00.

Two-thirds of the book incorporates new material, including a "working appendix" listing various organizations studying alternative futures. Education (pp. 157-182) is defined as "the process of providing each individual with the capacity to develop his potential to the full." Four levels of learning are viewed: The first level is the simple perception of a fact; the second occurs when two facts are interrelated; the third (to which present systems of education are geared) makes it possible to improve our level of performance within our present perceptions of the state of the universe. "We are beginning to perceive the need for fourth-level learning--learning which permits us to change our perceptions about the nature of the world in which we live . . . the styles which make possible fourth-level learning are profoundly contradictory to those needed in third-level situations."

17. GORDON, Kermit (ed.). Agenda for the Nation. Washington: The Brookings Institution, 1968. 620 pp.

Eighteen essays on the urgent issues of the day, including "Investing in Better Schools" by Ralph W. Tyler and "New Challenges to the College and University" by Clark Kerr.

18. GARDNER, John W. The Recovery of Confidence. N.Y.: W. W. Norton, 1970. 189 pp. $5.00.

Gardner's fourth book of incomparably cogent wisdom for our times--in this instance, directly facing a multitude of issues that are central to the problems that we face, with chapters on the redesign of institutions, dissent, society and the individual, individuality and community, leadership and common purpose, self-contempt and hope, the renewal of values, and what we can do. An appendix deals specifically with problems of cities, but the insights throughout the book are appropriate for any human organization, for all are seen as requiring renewal. Yet, "We find our institutions caught in a savage crossfire between uncritical lovers and unloving critics." (p. 25) To foster necessary and productive dissent, Gardner advocates more technically expert dissent, building evaluative processes into organizations, and developing complaint and appeal procedures that will permit the clientele of any institution to seek redress of grievances. There is also advocacy of releasing individual potentialities, self-discipline, pluralism, hope, etc. However, there are no cliches here; "Our problem is not to find better values but to be faithful to those we profess." (p. 131) RECOMMENDED

19. GARDNER, John. No Easy Victories. N.Y.: Harper & Row, 1968. 177 pp.

A collection of excerpts from Gardner's speeches and writings. Although there is no ostensible purpose, other than presenting the best of Gardner, the bits and pieces cohere together quite well, and practically all of them have important insights about the future of our society and the necessary directions for effective action. Particular attention is paid to education (pp. 67-112) for it is felt that "in terms of our national future, teaching is the most important profession." (p. 95) The comments concerning lifelong learning, which has "no adequate reflection in our social institutions," are especially of interest. Gardner's elegant, inspiring, and simple prose is at its best here.

20. GARDNER, John. Self-Renewal: The Individual and the Innovative Society. N.Y.: Harper & Row, 1963. 141 pp.

A lucid and powerful essay advocating "The Ever-Renewing System" and "Educating for Renewal." RECOMMENDED

21. National Goals Research Staff, Toward Balanced Growth: Quantity with Quality. Washington: USGPO, July 1970. 222 pp. $1.50.

Outlines options open to policy-makers and advantages and disadvantages of various actions in areas of population growth and distribution, environment, education, consumerism, technology assessment, basic natural science, and economic choices.

The introduction by Daniel Moynihan discusses the movement from program to policy-oriented government. The overall theme of balanced growth seeks a more interdependent development, as opposed to policies in the past that "have dealt in a largely independent fashion with specific objectives in their own context." Although judged by some to be overly equivocal, this important document suggests a new direction in public decision-making. The tone contrasts quite markedly, for example, with the certitude of purpose in Goals for Americans: Programs for Action in the Sixties (Item 24).

22. SCHULTZE, Charles L. with Edward K. HAMILTON and Allen SCHICK. Setting National Priorities: The 1971 Budget. Washington: The Brookings Institution , 1970. $6.50; paper, $2.95.

Examines the facts, figures, and alternatives on both sides of the President's budget proposals in critical areas such as defense, education, law enforcement, pollution control, and transportation.

23. LECHT, Leonard A. Goals, Priorities, and Dollars: The Next Decade. N.Y.: The Free Press, 1966.

An initial effort by the National Planning Association Center for Priority Analysis to reconcile aspirations (based on the 1960 report of the Commission on National Goals) and resources. Education, as one of the major national concerns, is costed out in a somewhat unimaginative style.

24. Goals for Americans: Programs for Action in the Sixties. The Report of The President's Commission on National Goals. Administered by The American Assembly. Englewood Cliffs, N.J.: Prentice-Hall, Spectrum Books, 1960. 372 pp.

Although nearly a decade old, this authoritative collection of essays still remains a classic. See especially Chapter 3, "National Goals in Education" by John W. Gardner.

25. U.S. Department of Health, Education, and Welfare. Toward A Social Report. Washington: USGPO, 1969. 101 pp. $.55.

The first attempt by the federal government to systematically measure the social well-being of the U.S. and an important preliminary step toward a regular system of social reporting. Seven areas have been selected for initial study with the aid of existing data: health and illness, social mobility, physical environment, income and poverty, public order and safety, participation and alienation, and learning, science, and art. In the latter category, it is tentatively concluded (on the basis of limited data) that children are learning more than

in the past, but that we could do much better. It is pointed out that The Digest of Educational Statistics "has virtually no information on how much children have learned," (the National Assessment of Educational Progress may soon supply some data to this end). A concluding appendix discusses "How can we do better social reporting in the future?" with comments on the deficiencies of existing statistics, the need for new social indicators, and the development of policy accounts (or meaningful integrations of social indicators). RECOMMENDED

26. GROSS, Bertram M., (ed.). Social Intelligence for America's Future: Explorations in Societal Problems. Boston: Allyn and Bacon, Inc., 1969.

A collection of authoritative articles on social indicators and the need for additional indicators. This volume is the hard cover marriage of the two volumes of The Annals of the American Academy of Political and Social Science entitled Social Goals and Indicators for American Society. (Vol. 371, May 1967; Vol. 373, September 1967).

Especially see Wilbur J. Cohen, "Education and Learning" (ANNALS, Vol. 373), which provides an excellent overview of education, introduces the concept of "the learning force," and points out the many areas where new educational indicators are needed.

27. SHELDON, Eleanor Bernert and Wilbert E. MOORE, (eds.). Indicators of Social Change: Concepts and Measurements. N.Y.: Russell Sage Foundation, 1968.

An authoritative work by and for sociologists. Especially see Daniel Bell, "The Measurement of Knowledge and Technology," (pp. 145-246) and Beverly Duncan, "Trends in Output and Distribution of Schooling" (pp. 601-672, 32 tables) The Bell article, a far-ranging essay covering implications of knowledge growth in a post-industrial society, is especially recommended.

28. BELL, Daniel (ed.). Toward the Year 2000. Work in Progress. N.Y.: Houghton Mifflin, 1968. 400 pp. Originally published by American Academy of Arts and Sciences in Daedalus, Summer 1967.

Deliberations of the Commission on the Year 2000. Five of the 22 articles involve education and education-related topics, while four others discuss futures methodology. Although well publicized, these essays do not appear to be especially superior to those of any other anthology on the future. But this is "Work in Progress," foreshadowing a series of 8 volumes that will appear over the next 2-3 years, starting with Harvey Perloff (ed.), U.S. Government in the Year 2000. Other volumes will cover Values and Rights (Fred C. Iklé), Intellectual Institutions (Stephen Graubard), The Life Cycle (Kai Erickson), The International System (Stanley Hoffman), The Social Impact of the Computer (Robert M. Fano), Science and Society (Franklin Long and

Robert Morison), and Business Institutions (Martin Shubik). Some of the volumes will be by a single author, while others will include contributed papers and discussions.

29. JUNGK, Robert and Johan GALTUNG (eds.). Mankind 2000. Oslo: Universitetsforlaget; London: Allen & Unwin, 1969. 368 pp. $14.90.

    Papers presented at the First International Future Research Conference at Oslo, 1967. The first array of writings from the international "invisible college" of professional futurists.

30. Papers of the International Future Research Conference, 1970. Kyoto, Japan: IFRC, Kyoto International Conference Hall, Takara-Ike, Sakyo-Ku, 1970. $31.50 plus $4.00 postage for complete set of 65 papers. Papers may be ordered separately at $.50 each. List available from IFRC.

    The English language papers (to be subsequently published), are in eight categories as follows:

    1. The Role of Futures and Future Research (7 papers)
    2. Research Methodology (7 papers)
    3. Technological Innovations and Social Change (12 papers)
    4. Education for the Future (11 papers)
    5. Environmental Changes--Time and Space (8 papers)
    6. New Values: New Man (7 papers)
    7. Social Systems and Social Innovation (5 papers)
    8. World Futures (8 papers)

31. MORPHET, Edgar L. and Charles O. RYAN (eds.). Prospective Changes in Society by 1980. Designing Education for the Future--An Eight-State Project, Vol. I. N.Y.: Citation Press, 1967. 268 pp.

32. MORPHET, Edgar L. and Charles O. RYAN. Implications for Education of Prospective Changes in Society. Designing Education for the Future: An Eight-State Project, No. 2. N.Y.: Citation Press, 1967. 323 pp.

    Twenty articles, largely by professional educators, responding to Volume I of this series, Prospective Changes in Society by 1980.

33. GORDON, Theodore J. and Robert H. AMENT. Forecasts of Some Technological and Scientific Developments and their Societal Consequences. Middletown, Connecticut: The Institute for the Future, IFF Report R-6, September 1969. 98 pp.

    The Delphi method involves a questionnaire mailed to a panel of experts who, after several iterations, tend to produce a converging group consensus--in this instance, on important prospective events, when they might take place, societal consequences and the degree to which they are likely to be beneficial or detrimental, and the degree to which intervention appears feasible.

The panelists ruminated on 32 physical events, including the following (median date of 50% chance of occurrence in parentheses): central data storage facility with wide public access (1980);, language translators (1980), sophisticated teaching machines responsive to student's physiology (1980), individual portable two-way communication devices (1990), and 3-D television (1990). Similarly, 44 biological events were considered, including cheap non-narcotic drugs for producing specific personality changes (1980), laboratory creation of artificial life (1980), relatively inexpensive techniques to increase the world's arable acreage by 50% (1990), the ability to stimulate maximum cognitive growth of pre-school children (1995), and chemical control of the aging process (2015).

In addition to the elaboration of consequences for each of these events, three scenarios are constructed by the authors of the technological world in 1985, 2000, and 2025. The overall conclusion is that "Taken together, the forecasted events, the expected consequences, and the suggested strategies which might be employed in manipulating them, tell of a changing world in which man is gaining more precise control over his environment, his information, and himself; a world in which the new control techniques will increase comfort, eliminate some human misery, increase military power, and increase knowledge, but which will concomitantly bring political and social problems of unprecedented dimensions; a world in which the techniques for coping with these problems will not be much more advanced than they are today." (pp. 7-8)

These forecasts, however, should not be taken as Revealed Truth. (See Weaver, Item No. 667 for qualifications to the methodology). Nevertheless, this broad array of possibilities should be considered, if for no other reason than as a compact listing of scientific aspirations circa 1969. HIGHLY RECOMMENDED

34. DE BRIGARD, Raul and Olaf HELMER. Some Potential Societal Developments, 1970-2000. Middletown, Conn.: Institute for the Future, IFF Report R-7, April 1970. 134 pp.

Unlike IFF Report R-6 (above), which has precedents back to the original Gordon and Helmer RAND study of Sept. 1964, this report concerns the first attempt to employ the Delphi method in forecasting societal developments. Adding to this lack of scientific precedent is the inherent difficulty of accurately gauging social matters in the present, let alone the future.

Nevertheless, the authors have forged ahead, providing substantial qualification to their effort. Potential developments are assessed in major categories of urbanization, the family, leisure and the economy, education, food and population, international relations, conflict in society and law enforcement, national political structure, values, and the impact of technology on government and society. In some instances, convergent opinions were obtained (e.g., inexpensive and uncomplicated mass contraceptive devices will be available, education

will become much more decentralized and diversified), while in other instances there was wide disagreement (e.g., the alienation and impersonality of urban life will increase, widespread famine will occur). At the end of each of the ten sections, there is a brief but valuable discussion of "some policy issues raised by the preceding expectations." In the final section of the report, the panelists estimated to the year 2000 the course of 46 statistical indicators such as GNP, divorce rate, expenditures for education, life expectancy, income levels, overseas travel, etc.

Being an initial effort, this panel was limited to 34 members--hardly enough, in light of the multitude of topics explored, to focus a balanced array of opinion on any one question. Aside from providing a substantial listing of largely unconnected events, the chief value of this document is as an exercise in futures methodology that may serve to influence future applications of the Delphi technique. RECOMMENDED

B. Impacts of Technology

35. National Commission on Technology, Automation, and Economic Progress. Technology and the American Economy. Vol. I. Washington: GPO, February 1966. 115 pp.

The overall conclusion of the Commission is that "our society has not met the challenge of technical progress with complete success. There is much to be done." (p. 6) Of the many recommendations for facilitating adjustment to change, those concerning education are among the most important: universal high school graduation, free public education through grade 14, an open-ended system of education stressing lifelong learning, etc. Chapter 9, "Improving Public Decision Making," has an excellent discussion of the role of "social accounting," systems analysis, and "inventing the future." RECOMMENDED

36. MULLER, Herbert J. The Children of Frankenstein: A Primer on Modern Technology and Human Values. Bloomington: Indiana University Press, 1970. 431 pp. $10.00.

A balanced, "informal" volume by a well-known "nonprofessional historian" (presently a Professor of English and Government) who addresses "the general reader." The view of technology is that the consequences have been "profoundly, thoroughly mixed," in contrast to Ellul, whose totally negative view is rejected as over-stated and over-simplified. After providing historical background, the impact on society and culture is explored in separate chapters on war, science, government, business, language, higher education, natural environment, urban environment, mass media, the traditional arts, religion, and people. The chapter on higher education observes the consequences of specialization and "the spell of scientific methods," with the view that "most college graduates--whatever their specialty--have too limited an understanding of our technological society for potential leaders." (p. 230) The

final three chapters are under the heading "Toward the Year 2000," examining utopian writers of the past, the individual papers from the Commission on the Year 2000, and Kahn and Wiener's The Year 2000. A concern for human nature and recurrent human values is expressed throughout, and it is concluded that the Brave New World of Huxley "looks like a real possibility, considering the nature of technological man and affluent man in America." (p. 405) As suggested by the subtitle, this volume should serve well as a primer, despite some rambling, a reticence to forecast, and some curious notions, e.g., "most middle-class teenagers appear to be basically satisfied with themselves and their prospects, by no means alienated from their society." (p. 364. This may have been truer in 1968 when written than in 1970 when published.)

37. BJERRUM, Chresten A. "Forecast of Computer Developments and Applications 1968-2000," Futures, 1:4, June 1969, pp. 331-338.

Results of a Delphi study, with the general consensus that "rapid development of advanced computers and computer applications is expected to continue to the year 2000 and result in much more influence on society than today." (p. 335) Some of the forecasts: a 50% reduction of the labor force in present industry by the late 1980's, all major industries controlled by computers in the year 2000, patients in major hospitals controlled by computers around 1975, computer prices (despite advanced technology) to decrease by a factor of 100 (!) by the end of the 1980's, etc.

38. WARE, W. H. Future Computer Technology and Its Impact. Santa Monica: The RAND Corporation, P-3279, March 1966.

Predicts an "increased pace in education," frequent retraining and re-education as "the normal way of life," and the computer as "the most important tool ever available for the conduct of research."

39. ROSOVE, Perry E. Computers and the Academic Marketplace. Santa Monica: Systems Development Corporation, SP-2819, April 10, 1967. 14 pp.

Looks at progress in man-job matching (NEA has already established a computerized personnel referral system) and looks to the next decade when "we can foresee at least three major computerized placement systems serving the needs respectively of higher education, elementary and secondary education, and vocational education."

40. BURKE, John G. (ed.). The New Technology and Human Values. Belmont, Calif.: Wadsworth Publishing Co., 1966. 408 pp.

A well-organized introductory reader including a section on "Education in a Technological Era," and a focus on problems such as leisure, automation, population, privacy, and government. RECOMMENDED.

41. CALDWELL, Lynton K., assisted by William B. DeVILLE and Hedvah L. SHUCHMAN (eds.). Science, Technology, and Public Policy: A Selected and Annotated Bibliography (2 Volumes). Prepared for the National Science Foundation by the Program in Public Policy for Science and Technology, Department of Government. Bloomington: Indiana University, revised edition, 1969. 492 pp. and 544 pp. respectively.

This massive and valuable reference work contains an estimated 5000 items, with annotations of varying length for each, and classified in 12 major sections and 46 sub-sections. "To provide a definitive treatment limited to publications in English for the years 1945-67 would increase the size of the bibliography by at least half. The size might easily be doubled if relevant editorials and articles in news magazines and in popular journals were included." (Vol. II, p. i) RECOMMENDED

42. San Francisco State College Center for Technological Education. Technology and Education in the 21st Century. Washington, D.C.: Communication Service Corporation, 1967. 107 pp.

Seven articles resulting from a symposium; interesting, but not about the 21st Century.

C. Manpower Requirements

43. CHORAFAS, D. N. The Knowledge Revolution: An Analysis of the International Brain Market. London: George Allen & Unwin, 1968; N.Y.: McGraw-Hill Paperbacks, 1970. 142 pp. $2.45.

"This book has been written to discuss Europe's economic and cultural future against the whole background of the world market for brains. It examines the role of industry, governments and universities in meeting the challenge of the 1970s and thereafter.

The realization that a modern economy's most important capital resource is not money, raw materials,or equipment but brains has been slow in coming. This fact is the kernel of the Knowledge Revolution . . . Human brain power is the key to the future . . ." (p. 13)

Written in a rather popular style, the book argues that the brain drain from Europe is a symptom of the basic disease in the European economic system. By 1970, however, there is evidence to suggest that the net flow of brainpower may be away from the U.S. Even so, this book provides a good introduction to an increasingly important problem.

44. BERG, Ivar. Education and Jobs: The Great Training Robbery. Foreword by Eli Ginzberg. N.Y.: Praeger (published for the Center for Urban Education), 1970. 200 pp. $7.50.

A well-researched sociological study of the relationship of education to employment, pointing out that many workers are over-educated, employee productivity does not vary with formal education, job dissatisfaction increases as educational level rises, and that "educational credentials

have become the new property in America." Of particular interest is evidence indicating that elementary and secondary teachers are less likely to stay in teaching as they move up the credentials ladder. Unfortunately, Berg only analyzes the single dimension of education and jobs, without suggesting other purposes (such as citizenship and individual development) that schools might satisfy. Although there are no trend data or forecasts, and only a hint of policy suggestions, this book nevertheless has broad implications for policy.

45. MACHLUP, Fritz. Education and Economic Growth. Lincoln: University of Nebraska Press, 1970. 106 pp. $4.25.

"Analyzes the effect of educational effort upon productivity, the influences that determine the demand for education, and the reasons why economic growth and higher living standards increase the cost of education per pupil." (advt.)

46. BRONFENBRENNER, Urie. "Damping the Unemployability Explosion: Today's Children Must Be Grown to Fit Tomorrow's Jobs," Saturday Review, January 4, 1969. pp. 108-110.

"Already our major problem of manpower is not one of unemployment but of unemployability . . . unless appropriate countermeasures are taken, the proportion of unemployables in our nation is likely to grow at an increasing rate in the decades ahead." (p. 108) Proposes an HEW Office for Family and Children's Services, a national Commission for Children, and neighborhood Centers for Parents and Children which "would offer cooperative group care and educational experience for children from early infancy through preschool age."

47. LECHT, Leonard A. Manpower Needs for National Goals in the 1970's. N.Y.: Praeger, 1969. 183 pp. $7.50.

A report of ongoing research by the National Planning Association's Center for Priority Analysis, predicated on the assumption that the U.S. will move ahead to implement national goals in 16 critical areas: agriculture, area redevelopment, consumer expenditures, education, health, housing, international aid, manpower retraining, national defense, natural resources, private plant and equipment, research and development, social welfare, space, transportation, and urban development. It is concluded that "If we continue to follow present patterns of employment, discrimination, training, and education, our attempts to implement national goals and solve these problems will be hamstrung by substantial labor shortages. Even advanced technology and increased automation will not alter this picture for . . . each new development creates additional manpower demands requiring new skills. Hence, only advance planning in both private and public sectors can alleviate manpower bottlenecks that would cripple new programs at the outset." (book cover) RECOMMENDED

48. ROHRLICH, George F. (ed.). Social Economics for the 1970's: Programs for Social Security, Health, and Manpower. Cambridge: University Press of Cambridge, Mass., June 1970.

Based on a conference held at the Temple University Institute for Social Economics. Contains six articles analyzing existing and proposed programs.

49. BEER, Samuel H. and Richard H. BARRINGER (eds.). The State and the Poor. Cambridge, Mass.: Winthrop Publishers, Inc., Aug. 1970. 320 pp. $4.50, paper.

"The focus throughout is on responsiveness to the needs of the poor in policy planning and operation at the state level." (advt.) Offers recommendations for education, manpower, etc.

50. GINZBERG, Eli. Manpower Agenda for America. N.Y.: McGraw-Hill, 1968. 250 pp.

A bland discussion of the evolution of manpower policy, social pathology, and related policy areas.

51. LARKIN, Paul G. "The Challenge to Higher Education of National Manpower Priorities," J. of Higher Education, 41:3, March 1970, pp. 195-203.

Also see Paul Larkin and John Teeple, "National Employment Goals and Higher Education," College and University Business, Oct., Nov., and Dec. 1969.

52. MANGUM, Garth L. (ed.). The Manpower Revolution: Its Policy Consequences. N.Y.: Doubleday Anchor, 1966. 580 pp. $2.45.

Excerpts from the 1963 Hearings of the Senate Subcommittee on Employment and Manpower, with a background on the dimensions of consequences from the manpower revolution and suggestions for solving major manpower problems.

53. ROSENBERG, Jerry M. Automation, Manpower, and Education. N.Y.: Random House, Studies in Education, 1966. 179 pp. $1.95 paper.

Discusses education's responsibilities under automation, manpower utilization, the jobs of tomorrow (categorized as dead-end jobs, status-quo jobs, and bright-future jobs), teaching the subject of automation, government training programs, and implications for educators, government, industry, unions, and the community.

54. FOLGER, John K., Helen S. ASTIN, and Alan E. BAYER. Human Resources and Higher Education. Staff Report of the Commission on Human Resources and Advanced Education. N.Y.: Russell Sage Foundation, 1970. $17.50.

"As the pace of change in our society increases, the need will be even greater for manpower planning to avoid imbalances among the professions

(cont'd)

and the frustration of individual career plans. This work develops our understanding of the set of interrelated forces that determines the education and utilization of our major national asset--able men and women." (advt.)

55. LEVITAN, Sar A. and Irving H. SIEGEL (eds.). Dimensions of Manpower Policy: Programs and Research. Baltimore: Johns Hopkins, 1966. 299 pp. $6.95.

17 original essays dealing with multifaceted developments in the field of human resources, as related to national and local programs.

56. SIEGEL, Irving H. (ed.). Manpower Tomorrow: Prospects and Priorities. N.Y.: Augustus M. Kelley, 1967. 219 pp. $7.50.

Report of a conference commemorating the W.E. Upjohn Institute for Employment Research. "Presents some 50 authoritative statements on the Manpower outlook for the next two decades and on the implications of this outlook for public and private policies, programs, and research." (advt.)

57. VENN, Grant. Man, Education, and Manpower. Washington: American Assn. of School Administrators (1201 16th St., N.W.), 1970. $6.00.

"Discusses the role of education in developing a comprehensive manpower program for an increasingly technological society." (Chron. of H. Ed.)

58. VENN, Grant. Man, Education, and Work: Postsecondary Vocational and Technical Education. Washington: American Council on Education, 1964. 184 pp. Bib., pp. 176-184.

Trends and issues in vocational and technical education, with 15 recommendations for national policy.

59. McCLELLAND, David C. and David G. WINTER. Motivating Economic Achievement: Accelerating Economic Development through Psychological Training. N.Y.: Free Press, 1969. 409 pp. $12.95.

60. ASBELL, Bernard. The New Improved American. N.Y.: McGraw-Hill, 1963. 222 pp.

A rambling and very popularized discussion of automation, jobs, and learning. Possibly of value to high school students.

61. Committee for Economic Development. Training and Jobs for the Urban Poor. CED Statements on National Policy. N.Y.: CED (477 Madison Avenue), July 1970. 78 pp. $1.25.

Evaluates current manpower training and employment efforts by government and business, and recommends new government programs and the establishing of experimental nonprofit Jobs Corporations to provide

(cont'd)

training and job opportunities for the urban poor.

62. U.S. Dept. of Labor. Patterns of U.S. Economic Growth: 1980 Projections of Final Demand, Interindustry Relationships, Output, Productivity, and Employment. Washington: USGPO, 1970. 131 pp. $1.25.

"Presents projections of employment by industry for 1980, based on projections of the labor force, potential gross national product, the composition and industry structure of gross national product, and industry output and output per man-hour." (GPO brochure)

63. U.S. Dept. of Labor, Bureau of Labor Statistics. Tomorrow's Manpower Needs: National manpower projections and a guide to their use as a tool in developing state and area manpower projections. Bulletin No. 1606, 4 vols. Washington: USGPO, 1969.

Vol. I, "Developing Area Manpower Projections," 100 pp. $1.00.
Vol. II, "National Trends and Outlook: Industry Employment and Occupational Structure," 121 pp., $1.25.
Vol. III, "National Trends and Outlook: Occupational Employment," 50 pp. 55¢
Vol. IV, "The National Industry-Occupational Matrix and Other Manpower Data," 247 pp. $2.00.

64. U.S. Dept. of Labor, Bureau of Labor Statistics. Occupational Outlook Handbook. Washington: USGPO, 1970. 859 pp. $6.25. 1970-71 Edition.

Issued biennially, this survey of 700 occupations in 30 key industries projects manpower needs to 1980. Although training requirements are rising, it was found that 8 out of 10 jobs to be filled will be open to young workers with less than a college degree. Professional and technical jobs will increase by 50% over 1968 levels, and service workers will increase by about 40%.

65. U.S. Dept. of Labor. Manpower Report of the President, including A Report on Manpower Requirements, Resources, Utilization, and Training. Washington: USGPO, March, 1970. 329 pp. $2.50.

The annual state of the labor force report with a discussion of recent changes, manpower policy and programs, and ongoing research.

66. International Institute for Educational Planning. Manpower Aspects of Educational Planning: Problems for the Future. Paris: UNESCO/IIEP, 1968. 265 pp.

Covers manpower and educational needs for rural and agricultural development, unemployment of the educated, and the implementation of plans.

67. SHOCKLEY, R.J. Your Future in Elementary School Teaching. N.Y.: Arco Publishing Co., 1970. $1.95 paper.

There are an additional 39 vocational guidance books published by Arco
(cont'd)

and prefaced by "Your Future in. . ." (See Subject Guide to Forthcoming Books, 4:6, Nov. 1970, p. 29). One wonders whether these books are oriented to the genuine interests of students and young people, or to employers who seek to recruit the young.

68. LEWIS, C.G. (ed.). Manpower Planning: A Bibliography. N.Y.: American Elsevier, 1969. 96 pp. $7.25.

D. Youth and Youth Culture

69. TANNER, J.M. "Earlier Maturation in Man," Scientific American, Jan. 1968.

"Children are reaching maturity at a progressively younger age. In addition to reaching sexual maturity earlier, children are also attaining their maximum height sooner...attributed primarily to improved nutrition." (The Futurist, Feb. 1969) Also see Walter Sullivan, "Boys and Girls Are Now Maturing Earlier," The New York Times, Jan. 24, 1971, p. 1.

70. GOODMAN, Paul. Growing Up Absurd: Problems of Youth in the Organized Society. N.Y.: Random House, 1956; Vintage Books, 1960. 296 pp. $1.45.

A classic critique, in many respects foretelling (and perhaps instigating to some degree) the present turmoil. "My strategem in this book is a simple one. I assume that the young really need a more worthwhile world in order to grow up at all, and I confront this real need with the world that they have been getting. This is the source of their problems. Our problem is to remedy the disproportion." (p. xvi) For Goodman's latest observations on youth and other matters, see New Reformation, Item No. 7.

71. MEAD, Margaret. Culture and Commitment: A Study of the Generation Gap. N.Y.: Doubleday and Natural History Press, 1970. 113 pp. $5.00; $1.95 paper.

A wide-ranging essay summarizing much of Mead's thinking over the past decades and adding new insights on our unique present that is "without any parallel in the past." The argument easily follows the chapter headings: The Past: Postfigurative Cultures and Well-Known Forbears (where lack of questioning and consciousness are the key conditions); The Present: Cofigurative Cultures and Familar Peers (which is institutionalized through age grading); and The Future: Prefigurative Cultures and Unknown Children (where the child represents what is to come). All men are seen as equally immigrants into the new era, and "Today, nowhere in the world are there elders who know what the children know, no matter how remote and simple the societies are in which the children live. In the past there were always some elders who knew more than any children in terms of their experience of having grown up within a cultural system. Today there are none." (pp. 77-78)

"Postfigurative cultures, which focused on the elders--those who had

(cont'd)

learned the most and were able to do the most with what they had learned--were essentially closed systems that continually replicated the past. We must now move toward the creation of open systems that focus on the future--and so on children, those whose capacities are least known and whose choices must be left open." (pp. 92-93) Despite a lack of suggestions as to what is to be done with the elders, the basic argument is provocative. RECOMMENDED

72. REICH, Charles A. The Greening of America: How the Youth Revolution is Trying to Make America Livable. N.Y.: Random House, 1970. 399 pp. $7.95. (Condensation in The New Yorker, Sept. 26, 1970, pp. 42-111).

The best-seller that attacks the corporate state and its premises as seen by Reich: 1) disorder, corruption, hypocrisy, war; 2) poverty, distorted priorities, and legislation by power; 3) uncontrolled technology and the destruction of the environment; 4) decline of democracy and liberty, powerlessness; 5) the artificiality of work and culture; 6) absence of community; and 7) loss of self.

To indicate the true significance of the new generation, three broad categories of consciousness are discussed: Consciousness I as the traditional outlook of the American farmer, small businessman, or worker trying to get ahead; Consciousness II representing the values of an organizational society--basically "liberal" but with the potential of becoming repressive; and Consciousness III as the new mode of independence and personal responsibility, seeking restoration of the non-material elements of man's existence.

"There is a revolution under way. It is not like revolutions of the past. It has originated with the individual and with culture, and if it succeeds it will change the political structure only as its final act. It will not require violence to succeed, and it cannot be successfully resisted by violence. It is now spreading with amazing rapidity, and already our laws, institutions, and social structure are changing in consequence. Its ultimate creation could be a higher reason, a more human community, and a new and liberated individual. This is the revolution of the new generation." (New Yorker, p. 42)

Reich has been widely attacked (by "Con II" people, of course) as a romantic, while "Con III" people undoubtedly find the book as a bible for our times. In any event, "Con III" has rapidly become part of our national idiom. RECOMMENDED

73. ROCZAK, Theodore. The Making of a Counter-Culture: Reflections on the Technocratic Society and Its Youthful Opposition. Garden City: Doubleday Anchor, 1969. 303 pp. $1.95.

74. von HOFFMAN, Nicholas. We Are The People Our Parents Warned Us Against. N.Y.: Quadrangle, 1968. 256 pp. $6.95 (Crest paper, 1971)

The searing iconoclast of The Washington Post "defines the spirit of the Flower Children and illuminates the much more lasting changes

occurring within American youth." (advt.)

75. BRADEN, William. The Age of Aquarius: Technology and the Cultural Revolution. Chicago: Quadrangle Books, 1970. 306 pp. $7.95.

"Armageddon is possible. So is Aquarius." The former would come about from the technicians of the technetronic society; the latter by an effective neo-humanism, which the hippie/drug movement has not provided. Braden, a journalist, has pasted together a vast array of ideas, quotations, and interviews with a wide variety of contemporary social thinkers--including an entire chapter contrasting Bruno Bettelheim and Richard Flacks and their views on youth. Although lacking cohesion and depth, one can find some worthwhile ideas on present trends.

76. WHEELER, Harvey. "The Rise of the Elders," Saturday Review, Dec. 5, 1970, pp. 14-15, 42-43.

Foresees, within a few decades, the full or partial conquest of death, resulting in a "middle age" of forty or more years, and a new dominating class of the aged involving those who are presently dominating as youth. Widespread philosophic and political consequences are sketched out.

77. FRIEDENBERG, Edgar Z. The Anti-American Generation. Chicago: Aldine, Jan. 1971. $5.95; $2.45 paper.

78. FEUER, Lewis S. The Conflict of Generations: The Character and Significance of Student Movements. N.Y.: Basic Books, 1969. 543 pp. $12.50.

An exhaustive historical account, with no sense of the present social context or of the future. Feuer (who was attacked in Berkeley) contends that an Oedipal pattern of conflict has always existed, but his overt hostility and tunnel vision suggest far more serious problems.

79. MICHAEL, Donald N. The Next Generation: The Prospects Ahead for the Youth of Today and Tomorrow. N.Y.: Random House, 1965. 218 pp. (Also Vintage Edition).

Discussion of many variables over the next twenty years under two major headings: "Conditions Essentially Independent of the Influence of Youth Developers" (economy, technology) and "Conditions Subject to Considerable Influence by Youth Developers" (family, education).

80. CORSON, William R. Promise or Peril: The Black College Student in America. N.Y.: W.W. Norton, 1970. $4.95.

Explores the danger of a black revolution in the U.S., drawing parallels with Vietnam.

81. WEIN, Bibi. The Runaway Generation: A Study in Depth of our Alienated Children. N.Y.: McKay, 1970. $6.95.

82. MOORE, Allen J. The Young Adult Generation: A Perspective on the Future. Nashville: Abingdon Press, 1969. 176 pp. $3.75.

Explains contemporary developments that are aggravating the generation gap.

83. PETTIT, George A. Prisoners of Culture. N.Y.: Charles Scribner's Sons, 1970? 291 pp.

An anthropologist employs a broad evolutionary perspective to analyzing the position of young people in contemporary society. A major concern is with the isolation of the school from the serious daily business of the community.

84. KENISTON, Kenneth. "You Have to Grow Up In Scarsdale to Know How Bad Things Really Are," The New York Times Magazine, April 27, 1969.

Behind this innocent title lies a profound explanation of the broad trends resulting in student revolt. Rejecting the "Oedipal Rebellion" interpretation of Feuer and the "Historical Irrelevance" theory of Brzezinski and Bell, Keniston sees the fusion of two revolutions. On the one hand, there is a continuation of the old revolution of the industrial society, involving "the progressive extension to more and more people of economic, political, and social rights, privileges and opportunities originally available only to the aristocracy." Affluent youth take these values for granted, seeing them as rights and not as goals. While demanding these rights, a new revolution--consonent with a post-industrial society--is developing. Beyond affluence is a concern with the quality of life and a stress on the values of individuality, participation, openness, and continuing human development.

85. BRONFENBRENNER, Urie. Two Worlds of Childhood: U.S. and U.S.S.R. N.Y.: Russell Sage Foundation, 1970 (?) $7.95.

In comparing child-rearing in the two major world powers, the author finds considerable neglect in the U.S. Advocates a Commission on Children to study and redistribute the priorities of our society.

86. BETTELHEIM, Bruno. The Children of the Dream. N.Y.: Macmillan, 1969. 363 pp.

A thorough report on the Israeli Kibbutzen, an alternative to modern child-rearing practices.

87. HEDGEPATH, William, and Dennis STOCK. The Alternative: Communal Life in New America. N.Y.: Macmillan; Collier Books, 1970. 191 pp. $3.95.

A sympathetic account, with many photographs, of the alternative life style favored by what is seen as an increasing number of young Americans.

88. SUTTON, Horace. "Drugs: Ten Years to Doomsday,?" Saturday Review, Nov. 14, 1970, 18+ pp.

(cont'd)

A worried overview of the drug situation with the following conclusion: "Not merely a youthful frivility to be equated with the roarings of the Twenties, not just the trappings of a new world order, not only the enlightened way of life of an untethered generation, the drug epidemic may be the shadow of an end-of-century plague. It may also be one part--the more visible part--of a larger set of socio-medical problems: suicides and alcoholism as well as narcotism, in which few medical advances have been made." (p.61)

89. VACHON, Brian. "The Jesus Movement is Upon Us," Look, 35:3, Feb. 9, 1971, pp. 15-21.

Pop "California forecasting" announcing that grooving on Jesus as a replacement of drug culture "shows every sign of sweeping East and becoming a national preoccupation." (If one has difficulty in imagining such a scenario, consider the utter implausibility in 1960 of drugs and riots).

E. Equality and Social Selection

90. GANS, Herbert J. "The Equality Revolution," The New York Times Magazine, November 3, 1968. 36+ pp.

Views modern social protest as focused on economic, political, and social inequality. Predicts that "In the years to come, the demand for more equality, democracy and autonomy is likely to spread...New York's current struggle over school decentralization is only a harbinger of things to come." (p. 69)

91. MILLER, S.M. and Pamela ROBY. The Future of Inequality. N.Y.: Basic Books, 1970. 272 pp. $7.95.

Inequality is seen as increasing during the 1970's due to the elimination of unskilled work and the increasing importance of education for all. Only deliberate public policy of compensatory programs could lead to greater equality, and this appears unlikely. Yet, there will be greater sensitivity to inequities, resulting in still more dissent. But the possibility of change is held forth: "What we are suggesting is a radical restructuring capable of appealing to a large number of voters who feel the need for change and do not see the possibility of a politically viable program." (p. 252) RECOMMENDED

92. U.S. Senate. Select Committee on Equal Educational Opportunity. Equal Educational Opportunity.
Part 1A: Equality of Educational Opportunity, An Introduction. Washington: USGPO, 1970. 413 pp. $1.50.
Part 1B: Equality of Educational Opportunity, Appendix. Washington: USGPO, 1970. pp. 415-741. $1.25

Hearings held April 20-29, May 5 and 12, 1970 "to study the effectiveness of existing laws and policies in assuring equality of educational

(cont'd)

opportunity and to examine the extent to which policies are applied uniformly in all regions of the United States." (GPO brochure)

93. GUTHRIE, James W., and others. Schools and Inequality. N.Y.: The Urban Coalition, 1969.

94. KEPPEL, Francis. The Necessary Revolution in American Education. N.Y.: Harper & Row, 1966.

The former U.S. Commissioner of Education discusses the need for equality of opportunity and quality education.

95. HOWE, Harold, Kenneth B. CLARK, James E. ALLEN et. al. Racism and American Education: A Dialogue and Agenda for Action. N.Y.: Harper & Row, Urban Affairs Series, 1970. 164 pp. $5.95.

96. HICKERSON, Nathaniel. Education for Alienation. Englewood Cliffs: Prentice-Hall, 1966. 98 pp. Paper.

"This book will be an attempt to show how our public schools, as mirrors of our society, have played a significant role in creating the conditions that have led to the waste of talent and ability and to the subsequent loss of dignity and self-worth on the part of millions of our citizens." (Preface)

Offers 13 proposals for reform, including denying entry into the teaching profession of intolerant teachers and weeding out those who are presently teaching, altering the social science curriculum, eliminating IQ testing, examining ability grouping, bringing families of the poor into the school environment as active participants, strengthening the academic curriculum offered to the economically deprived, continued desegregation, and massive in-service education programs.

97. GARDNER, John W. Excellence: Can We Be Equal and Excellent Too? N.Y.: Harper & Row, 1961; Harper Colophon edition, 1962. 171 pp. $1.45.

A well-known (indeed, perhaps classic) essay on three competing principles (hereditary privilege, equalitarianism, and competitive performance), the search for talent necessitated by our complex society, and the need to select a variety of talents. RECOMMENDED

98. Commission on Tests. Report of the Commission on Tests. I. Righting the Balance (118 pp. $2.00) II. Briefs (194 pp. $3.00). N.Y.: College Entrance Examination Board, 1970. $4.50 for both volumes in boxed set.

Recommends that the College Board should modify and improve its tests and associated services in seeking to serve its distributive, credentialing, and educative functions. It is suggested that the Board act for both its traditional institutional clientele and for its student clientele, and that the "other half" of non-college-going high school

(cont'd)

students be served through a job entry testing program and regional centers for guidance in continuing education. Thus, the theme of "Righting the Balance" in the first volume. The second volume consists of 14 papers by Commission members, serving as background to the many recommendations made. RECOMMENDED

99. YOUNG, Michael. The Rise of the Meritocracy, 1870-2033: An Essay on Education and Equality. London: Thames & Hudson, 1958; Baltimore: Benguin Books, Pelican edition, 1961. 190 pp.

A brilliant and witty essay by a sociologist who writes as a sociologist in the year 2033, defending the existing order and providing historical background for government leaders (a short-term forecast is also provided, which proves disastrously inaccurate). Brain-power planning became more effective as the measurement of merit (intelligence + effort) became more effective, so that "The world beholds for the first time the spectacle of a brilliant class, the fiver percent of a nation who know what five percent means." (p. 103) The most intelligent children obtained the best education, and to insure justice for late developers, quinquennial revaluations were held at Regional Centres for Adult Education. With the intelligent taking their rightful positions of leadership, the Pioneer Corps was established to provide the least responsible jobs for the least able people and the Home Help Corps provided domestic servants again, after a lapse during the egalitarian age. Consequently, the gap between the classes became wider, with social inferiors being inferiors in other ways as well. Despite the Equalization of Income Act of 2005, tensions grew between the Technician's Party (which issued the "Chelsea Manifesto" in 2009, arguing for a classless and tolerant society where every human being could develop his own special capacities for leading a rich life), and the extreme conservatives who, seeing the principles of heredity and merit coming together, wished to turn full cycle and restore the hereditary principle.

Despite necessary simplifications (assuming an industrial society and "the dictatorship of biology" over women), there is considerable insight to be had from this essay, and the format serves as an exemplary model of a "future history." RECOMMENDED

100. HAPGOOD, David. Diploma-Ism. N.Y.: Pegasus, February 1971. $6.95.

101. PORTER, John. "The Future of Upward Mobility," American Sociological Review, 33:1, February 1968, pp. 5-19.

A bland discussion of the growing manpower problem for post-modern industrial societies, and the inadequate function of Western educational systems relative to these needs.

F. The Knowledge Explosion

102. FISCHER, John. "The Stupidity Problem," Harper's, September 1962. Reprinted in John Fischer, The Stupidity Problem and Other Harassments. (cont'd)

N.Y.: Harper & Row, 1964, pp. 71-80.

A view of the "Overdeveloped Society" with a permanent surplus of some kinds of workers together with a permanent shortage of other kinds. "As the structure of society grows in both complexity and size, the need for able managers grows in almost geometric ration . . . we have built a society calling for a distribution of intelligence entirely different from that which God provided." Possibilities of optimizing human potential, however, are not discussed.

103. LANE, Robert E. "The Decline of Politics and Ideology in a Knowledgeable Society," American Sociological Review, 31:5, October 1966, pp. 649-662.

Argues that we live in a knowledgeable society, resulting in changes in policy-making procedures with an increasing application of scientific criteria. New knowledge is seen as setting up a disequilibrium or pressure which requires compensating thought and action. (In light of the events since this article's publication, one must conclude that it is either premature, or reflects an outdated naivete.)

104. MACHLUP, Fritz. The Production and Distribution of Knowledge in the United States. Princeton: Princeton University Press, 1962. 416 pp. $7.50.

A landmark volume that encyclopedically investigates the varieties of knowledge, forms of education (home, job, church, armed services, in addition to schools and colleges), research and development, the media of communication, information machines, and information services. However, all of this is for the knowledge system of economists, culminating in a calculation of the knowledge-producing occupations as a share of national income (rising from 18.5% to 26.8% in the 1950-1958 period). A proposal for school reform is made in passing--essentially, raising intellectual capacity through accelerated programs. "The way to get better-educated people in the United States is to make them learn faster, study more intensively . . ." (p. 144) It is unfortunate that Machlup does not know more about education and learning, and that educational planners do not know more about Machlup.

105. U.S. House of Representatives, Committee on Science and Astronautics. The Management of Information and Knowledge. Washington: USGPO, 1970. 130 pp. $.60.

Seven provocative papers prepared for the Eleventh Meeting of the Panel on Science and Technology, by Herman Kahn, Stafford Beer, Daniel J. Boorstin, Thomas F. Green, Paul Armer, Osmo A. Wiio, and George Kozmetsky. Especially see "Education as an Information System" by Kozmetsky and "Education and Schooling in Post-Industrial America: Some Directions for Policy" by Green. RECOMMENDED

106. SWEENEY, Francis S.J. (ed.). The Knowledge Explosion: Liberation and Limitation. N.Y.: Farrar, Straus & Giroux, 1966. 249 pp.
(cont'd)

15 articles derived from the 1963 Boston University Centennial Colloqium.

107. ONG, Walter J., S.J. Knowledge and The Future of Man: An International Symposium. N.Y.: Holt, Rinehart, and Winston, 1968. 276 pp.

15 essays from a 1968 symposium celebrating the Sesquicentennial of St. Louis University. The two sections of the book are sub-titled The Environment of Learning and Areas of Knowledge.

108. BRUNER, Jerome S. "Culture, Politics, and Pedagogy," Saturday Review, May 18, 1969, pp. 69-72+.

Discusses learning in the future in light of the knowledge explosion and new retrieval techniques, and argues that "there are three forms of activity that no device is ever going to be able to do as well as our brain with its 5×10^9 cortical connections, and I would suggest that these three represent what will be special about education for the future.

"The first is that we shall probably want to train individuals not for the performance of routine activities that can be done with great skill and precision by devices, but rather to train their individual talents for research and development . . . in the sense of problem-finding rather than problem-solving . . . A second special requirement for education in the future is that it provide training in the performance of 'unpredictable services' . . . acts that are contingent on a response made by somebody or something to your prior act . . . Third, what human beings can produce and no device can is art--in every form . . ." (pp. 71-72) RECOMMENDED

G. Global Perspectives on Education

109. COOMBS, Philip H. The World Educational Crisis: A Systems Analysis. N.Y.: Oxford, 1968. 241 pp. Bib., pp. 217-226.

A competent overview of international educational trends, indicating that problems of rising demand and system obsolescence are afflicting all nations in every part of the world. Although the discussion is organized around inputs and outputs, it is nevertheless highly readable, covering not only the formal system but nonformal or "periphery" education. An excellent annotated bibliography of 74 items is provided. RECOMMENDED

110. ILLICH, Ivan. "Outwitting the 'Developed' Countries," New York Review of Books, 13: Nov. 6, 1969, pp. 20-24.

A profound and illuminating essay from the viewpoint of the Third World. "The rich nations now benevolently impose a straightjacket of traffic jams, hospital confinements, and classrooms on the poor nations, and by international agreements call this 'development.'" (p. 20)

(cont'd)

But this merely aids the existing elites, while the proportion of the population suffering from hunger, pain, and exposure in 1969 is seen as greater than at the end of World War II. The resources are simply not available to take on the "outdated" models exported by the rich. Illich calls for "counter-research" on fundamental alternatives "distinct from most of the work done in the name of the 'year 2000'." For example, to improve health, safe water is more important than more surgical wards, and medical workers are more important than doctors. An egalitarian model is proposed for education, giving every citizen a minimum chance and therefore distributing scarce educational resources on an equal basis. Teaching adults to read is seen as a higher priority for public resources than investing in schools, with more immediate return on investment. "There is more hope of planning an institutional revolution in the Third World than among the rich." Perhaps.

111. ILLICH, Ivan D. Celebration of Awareness: A Call for Institutional Revolution. Introduction by Erich Fromm. Garden City: Doubleday, 1970. 189 pp. $5.95.

Twelve essays written over a period of years, including "The Futility of Schooling" and "School: The Sacred Cow." In the first article, even the U.S. is seen as too poor to provide compensatory education for the less well-off, and the case for the futility of schooling in the Third World is even more obvious. In summarizing the second essay, Illich claims that "Only if we understand the school system as the central myth-making ritual of industrial societies can we explain the deep need for it, the complex myth surrounding it, and the inextricable way in which schooling is tied into the self-image of contemporary man . . . This is a time of crisis in the institution of the school, a crisis which may mark the end of the 'age of schooling' in the Western world." (pp. 121, 123) The volume concludes with A Constitution for Cultural Revolution to cope with the central issue of our time that the rich are getting richer and the poor, poorer. The first article of the bill of rights would be "The state shall make no law with respect to an establishment of education."

112. ILLICH, Ivan. "Schooling: The Ritual of Progress," New York Review of Books, December 3, 1970, pp. 20-26.

Attacks the myths of institutionalized values, measurement of values, packaging values, self-perpetuating progress, and unending consumption. "School seems eminently suited to be the World Church of our decaying culture . . . The American university has become the final stage of the most all-encompassing initiation rite the world has ever known . . . School prepares for the alienating institutionalization of life by teaching the need to be taught . . . De-schooling is, therefore, at the root of any movement for human liberation."

113. ILLICH, Ivan. "Education Without School: How It Can Be Done," New York
(cont'd)

Review of Books, January 7, 1971, pp. 25-31.

Advocates reference services to educational objects, skill exchanges, peer matching, and reference services to educators at large who would be chosen by polling or consulting former clients. By choosing this thorough-going alternative, "we can depend on self-motivated learning instead of employing teachers to bribe or compel the student . . . we can provide the learner with new links to the world instead of continuing to funnel all educational programs through the teacher." (p. 25)

114. ILLICH, Ivan. De-Schooling Society. N.Y.: Harper & Row, World Perspective Series, April 1971.

Based on the two pre-publication articles above it would appear that this may be the most important book on education in 1971 (if not the 1970's), for, in a time of revolutionary fervor, Illich points to the schooling system as the root of our problems. But rather than advocating widespread educational reform (as is presently fashionable), he offers a thoroughgoing alternative that will enhance learning and provide equality of opportunity. The argument might be seen as rewarmed Paul Goodman, but it may nevertheless be embraced by the global counter-culture, and appears certain to spark widespread debate.

115. FREIRE, Paolo. The Pedagogy of the Oppressed. N.Y.: Herder & Herder, November 1970. $5.95.

A Brazilian educator's radical view that "every human being, no matter how 'ignorant' or submerged in the 'culture of silence,' is capable of looking critically at the world in a dialogical encounter with others, of perceiving his personal and social reality, and of dealing critically with it."

116. MAYER, Martin. Diploma: International Schools and University Entrance. N.Y.: Twentieth Century Fund, 1968. 250 pp.

A thorough analysis of "a small but not trivial problem which is likely to become important in the years ahead" as we increasingly become a global society, with more international workers seeking acceptable schooling for their children, and credentials that are acceptable to universities.

117. BEREDAY, George Z. F. and Joseph A. LAWERYS (eds.). The Education Explosion. The World Year Book of Education. N.Y.: Harcourt, Brace, and World, 1965. 498 pp.

34 articles on the rapidly expanding world-wide demand for education, described as "one of the most important phenomena of our age." The "explosion" refers to both knowledge and clientele.

118. BEREDAY, George Z. F. Essays on World Education: The Crisis of Supply and Demand. N.Y.: Oxford, 1969.

(cont'd)

18 essays evaluating various aspects of the world education system and appraising the state of education in Africa, Asia, Latin America, Europe, and the U.S.

H. State and National Perspective on Education

119. USDAN, Michael D., David W. MINAR, and Emanuel HURWITZ, Jr. Education and State Politics: The Developing Relationship Between Elementary-Secondary and Higher Education. N.Y.: Columbia University, Teachers College Press, 1969. 190 pp.

An excellent although preliminary attempt to analyze statewide coordination as of summer 1967, based on the experience of twelve states (California, Florida, Georgia, Illinois, Indiana, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania, and Texas).

The two general findings are that in most states the interlevel relationship verges on open political conflict; yet, "state policy-makers seldom recognize the relationship as something worthy of attention. They have been content, in the general style of American politics, to take problems piece-by-piece, confronting them only when necessary and then in as small portions as possible. The point, however, is that as the pressures rise and conflict grows, the probability of problems being handled successfully on this basis declines. The financial crisis of American education requires massive, broad scale consideration." (p. 188)

"On the whole, we have been pushed toward the conclusion that interlevel coordination in education is a desirable, if not essential, step. Such coordination need not be and indeed would not be likely to be tight and neat. But without some effort to bring the forces of education together into some form of integrated structure, the ability of the states to undertake rational planning in education is bound to suffer." (p. 187) RECOMMENDED

120. USDAN, Michael D., David W. MINAR, and Emanuel HURWITZ, Jr. The Politics of Elementary-Secondary and Higher Education. Denver: Education Commission of the States, November 1968. 32 pp. (Based on Chapters I and III of Education and State Politics.)

Outlines policy alternatives for improving the governance of the educational system and for improving finance systems. Under the former category, suggests a single state educational system, a single state system for grades 13 and 14, a formal coordinating board, coordinated government action, a comprehensive intergovernmental planning agency, and stimulating informal coalitions of education groups.

121. FITZWATER, C. O. State School System Development: Patterns and Trends. Denver: Education Commission of the States, Report No. 5, March 1968. 64 pp. $1.50. (cont'd)

"This study is designed to serve as a basic resource for state leadership as problems are analyzed and structural changes are proposed and discussed. Dr. Fitzwater compares state structures, discusses variations, and points up national trends. Among implications for action, the need to continue school district reorganization toward optimum efficiency and the necessity for keeping abreast of urban growth in structure and allocation of resources are stressed. The study is aimed directly at the need and desire of state decision-makers to know what is going on in other states and how other states are meeting educational problems in order to place their own problems and proposed solutions in perspective." (inside cover) Trends are discussed in local school district organization, intermediate administrative districts, and state education agencies.

122. BUDIG, Gene A. "Coordination in Higher Education: Past and Future," State Government Administration, 5:5, September-October 1970, pp. 4-7.

123. MORPHET, Edgar L. and David L. JESSER (eds.). Emerging State Responsibilities in Education. Denver, Colo.: Improving State Leadership in Education (1362 Lincoln Street), 1970. 168 pp.

An initial publication of a new project financed under Title V of ESEA. "In this publication, the implications of recent and prospective changes in society for the emerging roles, functions and relations of state education agencies primarily concerned with the improvement of provisions and procedures needed for planning and effecting improvements in elementary and secondary education are considered in some detail. Some of the major alternatives in organization and procedures are also discussed." (p. vi) RECOMMENDED

124. ERICKSON, Donald A. (ed.). Public Controls for Nonpublic Schools. Chicago: University of Chicago Press, 1969. 242 pp.

An "initial" exploration of how nonpublic education can be both responsible and free, based on a 1967 conference on state regulation. The first two chapters deal with the issue of the Amish in Iowa. No prescriptions are made.

125. National Academy of Education. Policy Making for American Public Schools. Recommendations based upon Working Papers prepared by The Committee on Educational Policy of the NAE. March 1969. 31 pp. (Available free from NAE Office, 723 University Ave., Syracuse, N.Y. 13210)

Issued by a blue ribbon group of educators; advocates fewer school districts, modification of fiscal inequities, upgrading quality of local leaders, a Federal Department of Education of cabinet rank, etc.

126. TIEDT, Sidney W. The Role of the Federal Government in Education. N.Y.: Oxford University Press, 1966. 243 pp., paper.

"An effort to gather into one volume a concise analysis of the

historical background of the role of the federal government in education, representative arguments for and against the government's greater involvement in educational concerns, a presentation of the questions revolving around aid to private schools, and a discussion of the present and future aspects of this complex problem." (p. vii) The book provides a good overview, although apparently written for college students, and concludes with several forecasts such as federal government involvement in education continuing at a rapidly increasing rate, the formation of some type of advisory board, and expansion of the role of the Office of Education. It is recommended that a National Educational Brain Trust be formed for probing the future. (p. 209)

127. QUATTLEBAUM, Charles A. Federal Educational Policies, Programs and Proposals. A Survey and Handbook. Part I: Background; Issues; Relevant Considerations. Washington: USGPO, House Document No. 398 (Printed for the use of the Committee on Education and Labor), December 1968. 167 pp. $.75.

A valuable overview of a variety of areas as follows:
--Federal policies in education, 1777-1960
--Congressional enactments concerning education and training, 1961-1966
--History, organization, and functions of USOE and NSF
--Recommendations of 17 governmental and 10 nongovernmental ad hoc advisory commissions, 1929-1967
--Policies advocated by 23 government bodies and 55 private organizations
RECOMMENDED

128. U.S. Department of Health, Education, and Welfare. The Federal-State Partnership for Education. Washington: USGPO, 1970. 182 pp. $1.50.

"This fifth annual report of the Advisory Council on State Departments of Education traces briefly the history of the state educational agencies to 1965 and examines subsequent developments to reach its conclusions on progress made and on what is needed to extend that progress." (advt.)

I. Multi-Level Perspectives

129. U.S. Office of Education. Digest of Educational Statistics. Washington: USGPO (annual).

The basic source document for education data.

130. U.S. Office of Education. Projections of Educational Statistics to 1978-79, 1969 Edition. Washington: USGPO (Stock No. 1770-0140), 1970. 169 pp. $1.50.

(cont'd)

Projections of enrollments, graduates, teachers, and expenditures (current and capital) for all levels of formal education. A basic data source.

131. U.S. Office of Education. Education in the Seventies. Office of Program Planning and Evaluation, Planning Paper 68-1, May 1968. 44 pp.

Projections of enrollments, staff, and expenditures to 1975 for elementary, secondary, and higher education.

132. U.S. Office of Education. Progress of Public Education in the United States of America, 1967-1968. FS 5.210:10005-68-A. Washington: GPO, 1968. 50 pp.

Report of the Office of Education to the 31st International Conference on Public Education (Geneva, July 1968), sponsored by UNESCO and the International Bureau of Education. "Progress" is used in the conventional rhetorical sense; the Report does not attempt to document progress by any definition.

133. FERRISS, Abbott L. Indicators of Trends in American Education. N.Y.: Russell Sage Foundation, 1969. 454 pp. Bib., pp. 418-454. $5.00 paper; N.Y.: Basic Books, 1970. $5.00.

Stemming from Sheldon and Moore's Indicators of Social Change (Item No. 27) and the continuing interest of the Russell Sage Foundation in monitoring social change, this massive array of data (32 tables and 74 figures) serves as a foundation for analyzing enrollment, teachers, quality of education, graduates, organization and finance, educational attainment, and the degree to which society's goals have been attained. There is also a useful bibliography of about 250 items.

This effort is a step toward establishing a system of social indicators or social accounts, and "by assembling in one place a great part of the statistical evidence one may then identify the missing elements, the data needed for adequate monitorship of the system." (p. 1)

Although the scholarly rigor has proved valuable in analyzing the data and pointing to new data needs, it has also strapped this volume with a crippling conventionality that severely limits its use. The "system" of elementary, secondary and higher education is unquestioningly accepted as the "world" of education, and there is not the slightest hint of a broader system of peripheral institutions, testing and research organizations, government agencies, scholarly and professional associations, and other interest groups that have a critical relevance to the core of educating institutions. Similarly, progress is measured against 13 of the goals suggested by the President's Commission on National Goals in 1960 (see Item 24), without considering that these goals might be formulated differently in 1970, not to mention 1980. Although it is important to measure outcomes against goals, scholarly rigor is in vain (and highly misleading) if

yesterday's goals are chosen.

There is also a question of whose goals. In the sterile framework established here, indicators on student and teacher dissent would not be considered. Finally, the book has no summary or conclusions and is written so that only fellow statisticians might appreciate it, raising the critical question as to who should "monitor" the system.

134. BYRNES, James C., with the assistance of Michael FOLK. The Quantity of Formal Instruction in the United States. Prepared for the U.S. Office of Education by the Educational Policy Research Center. Syracuse: EPRC, August 1970. 67 pp.

Examining the educational system as a whole, the development and maturation of a nearly universal system of secondary school instruction is considered as "the most significant event of the 20th Century in the development of educational institutions in the United States." Yet, the proportion of high school graduates completing a four-year post-secondary degree stands today roughly what it was about the turn of the century. The report concludes by describing two specific alternative states for the quantity of instruction (as measured by time), which highlights two possible extremes for future policy: a continuous rise in the amount of instruction received vs. stabilization.

135. The New York Times, Annual Education Review, Monday, January 11, 1971, pp. 47-78.

39 brief overview articles under seven headings: reforming education, some ventures in reform, styles and values, urban education, private and parochial schools, higher education, and management and finance. The 1970 edition (coming at the turn of the decade) is more oriented toward descriptive futures, whereas the 1971 edition appears more oriented toward action, or a prescriptive future. Both are excellent overviews of contemporary thinking. RECOMMENDED

136. The New York Times, Annual Education Review, January 12, 1970, pp. 49-84.

A fascinating array of about 50 short articles by leading names in all areas of education and academic disciplines that affect education. Several challenging views of the future (descriptive and prescriptive) appear amidst the rhetoric.

137. Education for the 1970's: Renewal and Reform. Messages to the Congress by Richard Nixon, President of the United States. Washington: USGPO, March 1970. 34 pp. $.30.

Includes the message on education reform and the message on higher education. The first message proposes The National Institute of Education and announces the establishing of a President's Commission on School Finance to study the shift from quantity to quality, future

(cont'd)

financial needs, disparities among districts and states, sources of funds for education, possible efficiencies, and non-public schools. The second message proposes a National Student Loan Association, a Career Education Program to start new programs in community colleges, and a National Foundation for Higher Education to support institutional excellence, innovation, and reform.

138. EURICH, Alvin C. Reforming American Education: The Innovative Approach to Improving Our Schools and Colleges. N.Y.: Harper & Row, 1969. 269 pp. $6.50.

"Education must be vastly improved to meet the challenges of the present and the future; the innovative approach is the most promising strategy for bringing about such improvement." (p. xiii) Taking a wide-angle view, the author discusses rigid dogmas, the necessity for bold public policies, provocative new developments, new patterns of reform at all levels, and education as a futurist enterprise.

An updated scenario (see Item No.383), "A 21st Century View of American Higher Education" (pp. 175-199), touches on university cities, sea-grant colleges on floating ocean cities, the revival of philosophy and the humanities to deal with spiritual malaise, learning terminals with graphic tablets and multi-purpose TV type displays, computerized learning, internationalization, individualization, etc. RECOMMENDED

139. ROGERS, Carl R. Freedom to Learn: A View of What Education Might Become. Columbus, Ohio: Charles E. Merrill, Publishing Co., 1969. 358 pp.

An eminent psychologist feels that "all teachers and educators prefer to facilitate experiential and meaningful learning, rather than the nonsense syllable type. Yet in the vast majority of our schools, at all educational levels, we are locked into a traditional and conventional approach which makes significant learning improbable if not impossible . . . It is not because of any inner depravity that educators follow such a self-defeating system. It is quite literally because they do not know any feasible alternative." (p. 5) Alternatives are suggested toward building "a fully functioning person" and a plan for self-directed change in an educating system is proposed. Although the comments are directed at all levels, a special chapter is devoted to "A Revolutionary Program for Graduate Education," in that the graduate level "is frequently the furthest behind the main stream of our culture and is the least educational in any true sense." (p. 189) RECOMMENDED

140. ROGERS, Carl R. "Interpersonal Relationships: USA 2000," Journal of Applied Behavioral Sciences, 4:3, July-September 1968, pp. 265-280.

Discusses the future of encounter groups, the shift from schools to learning environments, and the evolution of teachers to learning

facilitators. An optimistic view permeates the assessment of the potentialities of interpersonal relationships, seen as more intimacy, less loneliness, and an improvement in conflict resolution and relationships between the sexes. "All of this is possible if as a people we choose to move into the new mode of living openly as a continually changing process." (p. 274) But the chances of this eventuality are not assessed.

141. HUTCHINS, Robert. The Learning Society. N.Y.: Praeger, 1968. 142 pp.: Mentor Books, 1969. 166 pp. $1.25.

Argues for making liberal education universal, in that "the more technological the society is, the more rapidly it will change and the less valuable ad hoc education will become." Predicts that "In the closing decades of the twentieth century, education seems destined to become the principal preoccupation of all states."

142. GOODMAN, Paul. Compulsory Miseducation and The Community of Scholars. N.Y.: Vintage, 1964.

A reprint of two volumes previously published separately. "Miseducation" (Horizon Press, 1964) advocates an education that is less wasteful of human resources and social wealth than the present system, while "Community" (Random House, 1962?) advocates apartment-sized colleges.

143. RICHMOND, W. Kenneth. The Education Industry. London: Methuen, 1969. 237 pp. (Distributed in U.S. by Barnes & Noble)

Argues that it is both legitimate and necessary to think of educational services in terms of an industry, and "that the systematic and controlled application of science-based knowledge and techniques can bring about a massive enlargement of human experience . . . It is the conviction that education technology is destined to emerge as the central humane discipline of the future." (p. 204) There is little coordination to this book, however, with rambling discussions of The Improvident Society, The New York State Quality Measurement Project, Swedish Reform, The End of Literate Man, Beyond Literacy, General Systems Theory, and Educational Planning and Educational Technology.

144. MARIEN, Michael. "Notes on the Education Complex as an Emerging Macro-System" in E. O. ATTINGER (ed.), Global Systems Dynamics. N.Y.: Wiley-Interscience, 1970. pp. 225-244. (Reprints available from Educational Policy Research Center at Syracuse.)

Although addressed to a symposium of general systems theorists, the suggestion of an emerging macro-system may provide a useful overview to educational planners. The components of the system include core institutions (elementary, secondary, and higher education), peripheral institutions, suppliers, and interest groups of professionals and

(cont'd)

clients. In addition to increasing linkage of core components, there is a relatively greater growth of the periphery (adult, corporate training programs, etc.), the emergence, nationalization, and agglomeration of suppliers, and the spread of power to new interest groups--especially those representing personnel and students.

145. MARIEN, Michael. "The Basic Long-Term Multifold Trend in Education," The Futurist, IV:5, December 1970, pp. 220-223.

A synoptic chart of 13 general categories and several dozen trends indicates the broad shift from closed teaching systems to open learning systems. The major question is the rate of this transition: little or no transition will lead to greater conflict, differential adaptation will lead to greater inequality of opportunity, and full adaptation will lead to generational inversion (where the young become superior to the old).

146. BORTON, Terry. Reach, Touch, and Teach: Student Concerns and Process Education. N.Y.: McGraw-Hill, 1970. $4.95.

"Proposes an emphasis on personal feelings in educational processes, and argues that education should be seen as a means of personal growth." (Chronicle of Higher Education)

147. TAYLOR, Harold. The World as Teacher. N.Y.: Doubleday, 1969. 322 pp. $6.95.

The result of a two-year study of the education of American teachers in world affairs. Proposes a wide array of reforms to make education more relevant to the emerging world society. RECOMMENDED

148. FULLER, Buckminster. Education Automation: Freeing the Scholar to Return to his Studies. Carbondale: Southern Illinois University Press, 1962; Arcturus Books Edition, 1964. 88 pp.

A rambling, hortatory discourse presented in 1961 to the SIU Edwardsville Campus Planning Committee. Includes a forecast of education as "number one among the great world industries" and a vision of an "intercontinentally net-worked documentaries call-up system, operative over any home two-way TV set." (p. 48)

149. EBLE, Kenneth E. A Perfect Education. N.Y.: Macmillan, 1966. 215 pp.

Covers play, discovery, order, thinking, knowing, doing, style, worth, excitement and response, what's worth learning, etc., for all levels of education.

150. LIFTON, Walter N. (ed.). Educating for Tomorrow: The Role of Media, Career Development, and Society. N.Y.: Wiley, 1970. 244 pp. $8.95.

151. ROCHE, George Charles III. Education in America. Irvington-on-Hudson,

N.Y.: The Foundation for Economic Education, Inc., 1969. 163 pp.

A conservative view of conditions in the schools and colleges, concerned with deterioration of modern society, collapse of standards, decline of intellect, and lack of discipline. Desiring that students learn to think for themselves, education reform is seen as beginning with parents "with the recognition that better upbringing for their children lies in their hands, not in the hands of the state." (p. 154)

152. MOLNAR, Thomas. The Future of Education. London: Fleet Press Corp., 1961; Revised Edition, 1970. $5.50.

A conservative view.

153. PETERSON, A.D.C. The Future of Education. London: The Cresset Press, 1968; N.Y.: Humanities, May 1969. 234 pp.

In predicting future development, the author states at the outset that "education has one advantage over other social activities. It has lagged so far behind the changes in society as a whole that we already know that it at least needs considerable adaptation, before it is relevant even to the society in which we are now living." (p. 1) Although concerned with education in England, there may be considerable relevance to the U.S. as concerns the description and prescription of developments in content, methods, administration, the teaching profession, tertiary education, and financing. RECOMMENDED

154. MacARTHUR, Brian (ed.). New Horizons for Education: A Symposium on the future as Britain enters its second century of state education. London: Council for Educational Advance, 1970 (?). 111 pp.

155. LEYS, Wayne A.R. and P.S.S. Rama RAO. Gandhi and America's Educational Future: An Inquiry at Southern Illinois University. Carbondale: SIU Press, 1969. 137 pp. $4.85.

Reflections on solutions to problems of American education based on Gandhian thought.

156. SHRIMALI, Kalulal L. The Future of Basic Education. Chandigarh: Panjab University, 1966. 63 pp.

Advocates revitalizing Indian education by promoting Gandhi's concepts. No discussion of the future.

157. LEWIS, Joan. Utopias as Alternative Futures. Menlo Park: Educational Policy Research Center at Stanford, Research Memorandum EPRC-6747-7, March 1970. 50 pp.

Classifies utopias as Structured, Dynamic, and Transcendental societies, and infers that each group accommodates the needs of special personality types.

158. OZMON, Howard. Utopias and Education. Minneapolis: Burgess Publishing Co., 1970. 56 pp. $3.75 paper.

Discusses the educational ideas of Plato, Thomas More, Samuel Gott, Robert Owen, Samuel Butler, Edward Bellamy, William Morris, H. G. Wells, Aldous Huxley, B. F. Skinner, and others.

159. OZMON, Howard. Challenging Ideas in Education. Minneapolis: Burgess Publishing Co., 1967. 240 pp.

Final chapter on Education and Utopia.

160. FISHER, Robert T. Classical Utopian Theories of Education. N.Y.: Bookman Associates, 1963. 180 pp.

Discusses the role of education in six utopian works.

161. MASSÓ, Gildo. Education in Utopias. N.Y.: Columbia University, Teacher's College, Contributions to Education No. 257, 1927. 200 pp.

A scholarly review of utopian criticism of education, the place of education in utopias, and education in the home, church, school, workplace, and community.

II. Elementary and Secondary

A. General

162. American Association of School Administrators, Commission on Imperatives in Education. Imperatives in Education. Washington, AASA, 1966. 180 pp.

Policy statements (issued within the rigid framework of traditional concepts and rhetoric) for the reshaping of organizational patterns "to meet the needs of the times." Broad, but unsystematic; covering urban life, job training, creative talent, the moral fabric of society, psychological tensions, democracy, use of natural resources, leisure time, and international human betterment.

163. ANDERSON, Robert H. Teaching in a World of Change. N.Y.: Harcourt, Brace and World, Inc., 1966. 180 pp.

"A readable, authoritative summary of recent innovations in school organization, team teaching, school design, and other matters; written for teachers but useful for a wider audience." (Philip H. Coombs)

164. BANDER, Peter (ed.). Looking Forward to the Seventies: A Blueprint for Education. Buckinghamshire, Eng.: Colin Smythe, Ltd., 1968. 333 pp.

A British symposium of 27 distinguished contributors. Somewhat future-oriented, but hardly a "blueprint."

165. BEBELL, Clifford F.S. The Educational Program. Denver: Designing Education for the Future: An Eight-State Project, July 1967. 59 pp.

A background monograph providing an excellent summation of the first three Designing Education for the Future conferences (Item 221), in order to stimulate further work in each of the eight participating states. RECOMMENDED

166. BENSON, Charles S. The Cheerful Prospect: A Statement on the Future of American Education. Boston: Houghton-Mifflin, 1965. 134 pp.

As a means for bringing about equality in education, suggests that all reading teachers be qualified through standardized examinations.

167. BENTON, John E. (ed.). Forward Edge in American Education. Book I: The New System. Tempe, Arizona: National Center for Educational Innovation, 1968. 255 pp.

19 articles, including "Foundations of the New System" by W. W. Harmon, Director of Stanford EPRC. Other volumes in this teacher oriented series to follow.

168. BLISHEN, Edward (ed.). The School That I'd Like. Middlesex, England: Penguin Books, 1969. 171 pp.

A charming collection of astute comments by English children, ages 11-18, based on a competition conducted by The Observer in December 1967. Blishen concludes that:

"Standing out above everything else is the children's desire to teach themselves, rather than to be the passive targets of teaching: a great restlessness about classrooms, timetables, the immemorial and so often inert routine of schools. The children seem to sense what their elders are slow to sense, that you enter the world of the late twentieth century ill-armed if all you have done is to submit, to some degree or other, to a pre-determined, pinched, examination-harried course of instruction, from which in its nature most of the excitement and surprise of learning is excluded . . ."

"The evidence of all this writing is that our children are immensely anxious to be reasonable, to take account of practical difficulties. Some of these entries were dullish or dulled, but there was very little in them that was foolish. I can't imagine any educationist anxious to learn from what the children say who would not emerge from this book with his head full of perfectly firm and very sensible ideas." (pp. 13-14)

Quite so, and one would hope to see many American counterparts of this volume, to supplement critiques provided in underground newspapers. RECOMMENDED

169. BRAMELD, Theodore. The Climactic Decades: Mandate to Education. Foreword by Kenneth D. Benne. N.Y.: Praeger, 1970.

An overview of the American educational systems, with suggestions for overcoming defects.

170. BRAMELD, Theodore. Education for an Emerging Age: Newer Ends and Stronger Means. N.Y.: Harper, 1961. 244 pp.

171. BRICKMAN, William W. (ed.). Educational Imperatives in a Changing Culture. Philadelphia: University of Pennsylvania Press, 1967. 232 pp.

172. CAMPBELL, Roald F. and Robert A. BUNNELL. Nationalizing Influences on Secondary Education. Chicago: University of Chicago, Midwest Administration Center, 1963. 128 pp.

173. CLARK, Kenneth B. "Alternative Public School Systems," Harvard Educational Review, 38:1, Winter 1968, pp. 100-113.

Because of problems in present ghetto education Clark contends that it will be necessary to find "realistic, aggressive, and viable competitors" to the present public schools, such as regional state schools, federal regional schools, college and university-related open schools, industrial demonstration schools, labor union sponsored schools, and army schools.

174. COLEMAN, James S. "Toward Open Schools," The Public Interest, No. 9, Fall 1967, pp. 20-27.

The author of the well-known "Coleman Report" on Equality of Educational Opportunity advocates discarding the idea of the school as a closed institution and thinking of it as a base of operations. Opening the school is facilitated through released time, private contractors, payment by results, free choice for the consumer, and an intensified program of interscholastic activities.

175. Committee for Economic Development. Innovation in Education: New Directions for the American School. N.Y.: CED (477 Madison Ave.), July 1968. 75 pp. $1.00.

An authoritative statement on problems of American schools, goals, opportunities, costs, and benefits, concluding with a proposal for a Commission on Research, Innovation, and Evaluation in Education.

176. Committee for Economic Development. The Schools and the Challenge of Innovation. Supplementary Paper No. 28. N.Y.: CED, January 1969. 341 pp. $7.95; $4.00 paper.

13 background papers to the above volume, covering finance, evaluation and research, teachers, and instructional systems.

177. CONANT, James B. The American High School Today: A First Report to Interested Citizens. N.Y.: McGraw-Hill, 1959; Signet Books, 1964. 141 pp. $.60.

A well-known establishmentarian study concerned with the comprehensive high school in school districts of 30,000 to 100,000 inhabitants, and concluding with 21 recommendations on matters such as counseling, individualized programs, required programs, ability grouping, English composition, slow readers, the academically talented, organizing the school day, summer school, foreign languages, home rooms, science courses, social studies, etc.

178. CONANT, James Bryant. The Child, the Parent, and the State. N.Y.: McGraw-Hill, 1959; paper edition, 1965. 211 pp. $1.95.

Four lectures on secondary education discussing the governmental framework within which schools are operated, financial difficulties in light of Cold War challenges, the necessity for the entire citizenry to be awakened to the need for "radical reform" (tame in the light of today's awareness), and "The Revolutionary Transformation of the American High School" to a comprehensive institution serving nearly all youth. Concludes with a prophecy that "If the free world survives the perils that now confront it, I believe historians in the year 2059 will regard the American experiment in democracy as a great and successful adventure of the human race . . . They will regard the American high school, as it was perfected by the end of the twentieth century, not only as one of the finest products of democracy, but as a continuing insurance for the preservation of the vitality of a society of free men." (p. 103) Needless to say, this forecast sounds other-worldly twelve years later.

179. CULBERTSON, Jack (ed.). "Education and Public Policy Symposium," Public Administration Review, XXX:4, July-August 1970, pp. 331-375.

Seven important articles as follows: "Educational Governance and Policy-Making in Large Cities" (Luvern L. Cunningham),"Low-Income Families and the Schools for their Children"(Theodore R. Sizer), "Federal Influences on Educational Policy" (Roald F. Campbell), "New Relationships Between Education and Industry" (Francis Keppel), "The State and Educational Policy" (Lawrence D. Haskew), "The Changing Nature of the School Superintendency" (Sidney P. Marland, Jr.), and "The Financing of Elementary and Secondary Education" (H. Thomas James). RECOMMENDED

180. de GRAZIA, Alfred and David A. SOHN (eds.). Revolution in Teaching: New Theory, Technology, and Curricula. N.Y.: Bantam Matrix Editions, 1964. 310 pp. $.95.

30 contributions on hopes and happenings in curriculum and uses of technology. A worthwhile collection, although perhaps outdated and overly enthusiastic in its titling.

181. DEXTER, Lewis A. The Tyranny of Schooling: An Inquiry into the Problem of "Stupidity." N.Y.: Basic Books, 1964. 182 pp.

Attacks the negative aspects of compulsory education and the vast overemphasis on schooling and intellectual achievement in our society.

182. DOUGLASS, Harl R. Trends and Issues in Secondary Education. Washington, D.C.: The Center for Applied Research in Education, Inc., 1962. 101 pp.

A compact listing of a wide array of trends. Non-critical, little supporting data, and nine years old, but nevertheless an interesting overview of many fine details.

183. Education Now for Tomorrow's World. Report of the California Association of Secondary School Administrators' Curriculum Committee, Subcommittee on Curriculum Objectives, 1970 to 2000. May 1968. 62 pp.

184. ELAM, Stanley and William P. McCLURE (eds.). Educational Requirements for the 1970's: An Interdisciplinary Approach. N.Y.: Praeger (Published for Phi Delta Kappa), 1967. 266 pp.

Seven articles plus panel discussion, largely covering educational adjustments to new economic realities.

185. EURICH, Alvin C. and the Staff of the Academy for Educational Development (eds.). High School 1980: The Shape of the Future in American Secondary Education. N.Y.: Pitman Publishing Corp., 1970. 304 pp. $8.50.

Articles on the reformed curriculum in English, Social Studies, Science, Foreign Languages, and Vocational Education, in addition to views of the future of school buildings, guidance and testing, the school without walls, relevance, etc. RECOMMENDED

186. FOOTLICK, Jerrold K. Education: A New Era. Silver Spring, Md.: The National Observer, Newsbook, 1968 (?). 176 pp. $2.00.

A popular overview of new trends and issues, with many photographs. But where is the "New Era"? (See item 188)

187. GATTEGNO, Caleb. What We Owe Children: The Subordination of Teaching to Learning. N.Y.: Outerbridge & Dienstfrey, 1970. 118 pp.

188. GOODLAD, John I., M. Frances KLEIN, and Associates. Behind the Classroom Door. Worthington, Ohio: Charles A. Jones Publishing Co., 1970. 116 pp. $2.75, paper.

Based on the organizational, curricular, and instructional thrusts which have been widely recommended and which one "might reasonably expect to be substantially implemented," the authors studied 150

classrooms in 67 schools and found that all of the changes recommended over the past 15 years "were blunted on school and classroom door." They also found a universal sameness, "a considerable discrepancy between teachers' perceptions of their own innovative behavior and the perceptions of observers," supplementary and enrichment activities differing little from regular activities, non-identified goals in the classroom and the school as a whole, and school personnel appearing to be very much alone in their endeavors.

"Perhaps the most telling observation about our educational system is that there is not, below the level of intense criticism and endless recommendations for improvement, any effective structure by means of which countervailing ideas and models may be pumped in and developed to the point of becoming real alternatives. Stated conversely, the system is geared to self-preservation, not to self-renewal." (p. 99)

The three critical entry points recommended for the "reconstruction of schooling" pertain to the initial pedagogical skills developed in future teachers, on-the-job updating of these skills, and the continuous reconstruction of schooling to meet the changing conditions of communities and of society in general. Considering the non-adaptiveness of the school, however, it is surprising that the authors are not driven to recommend far more radical alternatives entailing new and competitive institutions. The volume is valuable, however, for its reminder of the continuing--if not widening--gap between ideal and reality. RECOMMENDED

189. GOODLAD, John I. "The Schools vs. Education," Saturday Review, April 19, 1969.

A critique, based on many classroom visits, of the lack of progress in the past ten years. "Popular innovations of the decade--nongrading, team teaching, 'discovery' learning, and programmed instruction--were talked about by teachers and principals alike but were rarely in evidence." This well-known educator concludes that "The schools are conspicuously ill-suited to the needs of at least 30 percent of their present clientele." (p. 61) Recommended as a short, no-nonsense overview of the state of elementary and secondary education in America.

190. GOODLAD, John I. The Future of Learning and Teaching. An Occasional Paper of The Center for the Study of Instruction. Washington: National Education Association, 1968. 24 pp.

Address at 1967 inauguration ceremonies of Sam Lambert as NEA Executive Secretary. Discusses impact of computer on schools and informal education, the need for "human-based schools" and a humanistic curriculum. By the year 2000, "School, as we now know it, will have been replaced by a diffused learning environment involving homes, parks, public buildings, museums, and an array of guidance and programming centers." (p. 22) Teachers are warned that if they do not legitimize

(cont'd)

the computer, the profession will be bypassed. RECOMMENDED

191. GOODLAD, John I. (ed.). The Changing American School. Sixty-Fifth Yearbook of the National Society for the Study of Education, Part II. Chicago: University of Chicago, 1966. 319 pp.

192. GOODLAD, John I. and Robert A. ANDERSON. The Nongraded Elementary School. N.Y.: Harcourt, Brace & World, 1959; revised edition 1963. 248 pp. Bib., pp. 227-244.

A thorough exposition of an alternative pattern of school organization that "provides for the continuous, unbroken, upward progression of all pupils." (p. 219) Bibliography of about 350 items.

193. GLASSER, William, M.D. Schools Without Failure. N.Y.: Harper & Row, 1969. 235 pp. $4.95.

A psychiatrist sees the schools as largely failure-oriented which is "the most impractical result of education." By failing to satisfy the basic needs of love and attaining self-worth, the author estimates, from his experience in the central city of Los Angeles, "that 75 percent of the children do not achieve a satisfactory elementary education." Parents do not complain because "they cannot compare their children's failure with a successful school experience of their own . . ." (p. 113)

Based on the principles of his previous book, Reality Therapy, Glasser makes many suggestions that he has employed successfully: class meetings, reasonable rules, student conversations with adults, inviting graduates back to talk with students, abolishing grading, giving recognition to students with bad records when they start to do well, and using failing students to tutor younger failing students. Although oriented primarily toward elementary education because it is considered most important, the ideas in the book are applicable to all levels. Especially see chapter 5 on Relevance, the attack on Fact and Memory Education in chapter 6, and chapter 13 on Morality (or the need to learn and experience the value of truthfulness, which is often discouraged by schools). A simply-written, sensitive, and gentle book encouraging profound and humane reform without lapsing into ear-splitting rhetoric. RECOMMENDED

194. GREEN, Thomas F. Work, Leisure, and the American Schools. N.Y.: Random House, Studies in Education, 1968. 174 pp. $2.25 paper.

A philosopher's discussion of work and labor, time and leisure, work and job, and the quest for potency. "The guiding consideration has been the fact that the way we think about work, jobs, vocations, leisure, and time--in short, the ideology of work--is of central importance in the process of education. Indeed, it might not be too much to say that the way we think about work may well be the most

significant factor in all that we do in the matter of schools and schooling . . . What I wish to argue is roughly that, unless some current trends in the structure and culture of American schools are reversed or strongly modified, we may find ourselves approaching a leisure society with a system of education that has been increasingly directed toward preparation for a job-oriented society." (pp. 147-148)

195. GROSS, Ronald and Judith MURPHY (eds.). The Revolution in the Schools. N.Y.: Harcourt, Brace & World, 1964. 250 pp.

15 reprints of the "most promising experimental ideas in American education today . . . (with) the conviction, based on direct experience, that America's schools can improve dramatically in the years ahead." (iii) Leading educators discuss television, computers, team teaching, the non-graded school, the new schoolhouse, creativity, curricula, etc., with the school of the future given a brief description. (pp. 4-6) But where is the "revolution"? Interestingly, Gross' latest anthology is titled Radical School Reform (see below).

196. GROSS, Ronald and Beatrice (eds.). Radical School Reform. N.Y.: Simon and Schuster, 1969. 350 pp. $7.95.

A wide-ranging anthology of 23 articles. "Radical means going to the root, posing the fundamental problems, and responding with theories and practices which are genuine alternatives to present theory and practice . . . radical means unorthodox ways of promoting learning that fall outside the scope of conventional or even innovative school practice. This book reflects the entire range of radical thought and practice, from the grand demand that compulsory public education be repealed and the formal educational system dismantled to reports of intensely practical teachers working constructively within the existing situation but nevertheless using truly unorthodox teaching techniques." (p. 14) RECOMMENDED

197. GUGGENHEIM, Fred and Corinne L. GUGGENHEIM (eds.). New Frontiers in Education. N.Y.: Grune and Stratton, Inc., 1966. 310 pp.

18 articles on new curricula concepts, new concepts in school organizations, and new media of instruction. Claims to describe "the new frontiers of education in all its dimensions."

198. HARRIS, Seymour E. (ed.). Education and Public Policy. Berkeley: McCutcheon Publishing Co., 1965. 347 pp.

The result of a 1962-63 Harvard seminar. Papers and discussion on school control, religious issues, student aid, educational planning, educational research, accreditation, admissions, productivity, manpower, education and economic productivity, and government-education relationships. Although a few policy suggestions are sprinkled throughout, the volume is primarily useful for the questions it raises.

199. HARRIS, Seymour E. Challenge and Change in American Education. Berkeley: McCutchan, 1965.

200. HART, Leslie A. The Classroom Disaster: How the Outworn Classroom System Cripples Our Schools and Cheats Our Children, and How to Replace It. N.Y.: Columbia University, Teacher's College Press, 1969. 354 pp.

201. HEISE, B. W. (ed.). New Horizons for Canada's Children. First Canadian Conference on Children, Ste. Adele and Ste. Marguerite, Quebec, 1960. Toronto: University of Toronto Press, 1961. 199 pp.

202. KING, M. R. (ed.). Roads to Maturity. 2nd Canadian Conference on Children, Montreal, 1965. Toronto: University of Toronto Press, 1967.

203. HOLT, John. How Children Fail. N.Y.: Pitman Publishing Corp., 1964. 181 pp.

It is contended that adults destroy most of the intellectual and creative capacity of children. They "encourage children to act stupidly, not only by scaring and confusing them, but by boring them . . ." (p. 169) The alternative to the present style of education (or non-education) "is to have schools and classrooms in which each child in his own way can satisfy his curiosity, develop his abilities and talents, pursue his interests . . ." (p. 180)

204. HOLT, John. What Do I Do Monday? N.Y.: E. P. Dutton & Co., 1970. 318 pp. $6.95.

The latest book by a well-known critic, designed for teachers, parents, children, and friends of children.

205. HOLT, John. The Underachieving School. N.Y.: Pitman, 1969. $4.95. Delta Paperback, 1970. 208 pp. $2.25.

206. HUNNICUTT, Clarence W. (ed.). Education 2000 A.D. Syracuse: Syracuse University Press, 1956. 321 pp.

18 addresses commemorating the 50th anniversary of the Syracuse University School of Education, each purportedly considering "the present status and probable directions of elementary education in our country." Unfortunately, nearly all of the papers are simplistic rhetoric, with "2000 A.D." merely utilized as an invitation to prescribe, often in incredibly minute areas. The volume serves, however, as an example of the future as a rhetorical device (e.g., Francis Keppel, "Universities and Educational Leaders--The Next Fifty Years"), conceived in an age of relatively unabated optimism.

207. ITZKOFF, Seymour W. Cultural Pluralism and American Education. Scranton, Pa.: International Textbook Co., 1969. 202 pp.

A ponderous essay on the social and philosophical foundations of education, with the final chapter outlining "A Strategy for Change" by discussing dialectical trends, the nemesis of population, student rights, local control, and private education. Concludes that "Ultimately man will have to face intellectually the issues of equality, universality, and plurality" (p. 196), and several comments are offered on the pluralism of tomorrow that "will present choice of a variety never before thought possible."

208. JENCKS, Christopher. "Is the Public School Obsolete?", The Public Interest, No. 2, Winter 1966, pp. 18-27.

Several possibilities discussed to "liberate the schools from the dead hand of central administration."

209. JOYCE, Bruce R. The Teacher and His Staff: Man, Media, and Machines. Washington: National Education Association, Center for the Study of Instruction and National Commission on Teacher Education and Professional Standards, May 1967. 28 pp.

A description of the school of tomorrow, where there will be "a new and more responsible role for the competent and imaginative teacher and interesting ways to orchestrate his resources." (NEA brochure)

210. JOYCE, Bruce R. Alternate Models of Elementary Education. Waltham, Mass.: Blaisdell Publishing Co., August 1969.

211. KEMELMAN, Harry. Common Sense in Education. N.Y.: Crown, 1970. $5.95.

The author of Friday the Rabbi Slept Late provides "a warm and penetrating analysis of the faults and the problems of today's schools, with practical suggestions for improving the quality of education . . . that will put 'education' back as the top priority for schools, and values back into the curriculum." (advt.)

212. KIMBALL, Solon T. and James E. McCLELLAN, Jr. Education and the New America. N.Y.: Random House, 1962; Vintage Edition, 1966. 402 pp.

"Bringing into contemporary focus the traditional message of the professional educationist, namely that the schools must change to meet the demands of a changing society." Prescriptions are summarized in Chapter 13, "Education for Commitment."

213. KOHL, Herbert R. The Open Classroom: A Practical Guide to a New Way of Teaching. N.Y.: New York Review/Vintage, 1969. 116 pp. $1.65.

"This book is a handbook for teachers who want to work in an open environment . . . It is important not to equate an open classroom with a 'permissive' environment." (p. 15) Kohl explains alternatives to textbooks and the domination of the teacher, learning from the experience of the students, establishing rules and routines only as necessary

(cont'd)

for a particular class, discipline, how a teacher can survive in an oppressive bureaucracy while maintaining an open and exciting classroom and treating students as people. It is contended that these principles of non-authoritarian education are applicable to all fields of learning. RECOMMENDED

214. KRAFT, Ivor. "The Coming Crisis in Secondary Education," The Bulletin of the National Association of Secondary School Principals, 49:298, February 1965, pp. 5-42.

The entire issue is focused on this trenchant article, which contends that the coming crisis will be fully upon us by 1975. The three components of the crisis involve the incompetence and timidity of educators, administrators, school boards, and policy makers, leaving secondary education leaderless and aimless; the polarization of schools into services for largely college oriented youth and services for lower class youth; and the content and subject matter of education or the discrepancy in relating the learner to what is to be learned. The remainder of the issue is devoted to 14 respondents.

215. LEONARD, George B. Education and Ecstasy. N.Y.: Delacorte Press, 1968. 239 pp.

A journalistic description of how conventional classrooms inhibit learning. The proposed alternative, which utilizes presently available technology, centers on a "total environment" concept: "It is only when the learning environment is viewed and acted upon as a whole that education can become truly efficient and joyful." (p. 182) Includes a scenario, "Visiting Day, 2001 A.D." of a grade school where children are "free learners," coming and going as they please, and partaking of a variety of electronic learning aids.

216. LERNER, Max. Education and a Radical Humanism: Notes Toward a Theory of the Educational Crisis. The Kappa Delta Pi Lecture Series. Columbus: Ohio State University Press, 1962. 63 pp. $2.50.

"The American educational system . . . must present the nature and operation of the harsh realities of the contemporary world." Proposes a program of creative education based on individual excellence and a sense of human dignity, and an ethos based on a "radical humanism" that "makes the richness, variety, and fulfillment of human life the test of thought and action and passion, and makes man the basis of society . . ." (book jacket)

217. LINEBERRY, William P. (ed.). New Trends in the Schools. The Reference Shelf, 39:2. N.Y.: H. W. Wilson Co., 1967. 211 pp.

20 popular reprint articles covering the impact of the federal government, new programs and methods, etc. Superficial and of little value.

218. McCLELLAN, James E. Toward an Effective Critique of American Education.

Philadelphia: Lippincott, 1968. 324 pp.

An analysis of five contemporary writers with the following chapter headings: 1) The System, The Establishment, and The Search for a New Politics, 2) James Bryant Conant: A Man-Made System and Vice-Versa, 3) Theodore Brameld and the Architecture of Confusion, 4) Jacques Barzun: Is It Enough to Be an Anti-Anti-Intellectual?, 5) B. F. Skinner's Philosophy of Human Nature: A Sympathetic Criticism, 6) Paul Goodman: A Systematic Thinker Fights the System, 7) Where is the Polity?

219. McLUHAN, Marshall and George B. LEONARD. "The Future of Education: The Class of 1989," Look, 31:4, February 21, 1967, pp. 23-25.

A short and provocative forecast of education by two leading thinkers. Mass education is seen as a child of the mechanical age, and with the advent of new technologies, "the very first casualty of the present-day school system may very well be the business of teacher-led instruction as we now know it." The new education "will be more concerned with training the senses and perceptions than with stuffing brains . . . The new student who makes his own educational space, his own curriculum and even develops many of his own learning methods will be unique, irreplacable." RECOMMENDED

220. Montgomery County (Md.) Student Alliance. "A Study Report of the Montgomery County Public School System. Wanted: A Humane Education. An Urgent Call for Reconciliation Between Rhetoric and Reality," in Diane DIVOKY (ed.), How Old Will You Be in 1984? Expressions of Student Outrage From the High School Free Press. N.Y.: Discus Avon, 1969. $1.25 paper.

The 250 selections from the underground press in the Divoky volume are of some interest, but the "Study Report" (pp. 329-350) is extremely well done and compares favorably (in its maturity and insight) with many if not all of the other "adult" reports cited here. The county public schools are attacked for basing the system on fear, dishonesty, destruction of eagerness to learn, causing alienation, demanding blind obedience to authority, stifling self-expression, narrow scope of ideas, prejudice, and instilling self-hate. "The extent to which school officials appear unaware or unconcerned about how students feel and the effects of the schools is frightening and disturbing." (p. 334) 24 recommendations are made, including an ombudsmen, an end to secret files, student input in teacher evaluations, eliminating letter grades, a free press, shorter and more flexible learning modules, relevant courses, informing students of their rights, a student voice on the school board, etc. RECOMMENDED

221. MORPHET, Edgar L. and others (eds.). Designing Education for the Future: An Eight State Project, 7 volumes, 1966-1969.

A massive project involving the eight mountain states and headquartered

in Denver. Although the seven volumes, final report, and five sound filmstrips that resulted tend to be rather conventional, leaving one with the impression of blind men somewhat better informed about their elephant of inquiry, there are nevertheless some valuable contributions here, and the ambitious structuring of the entire project is to be especially commended. Most of the following are published by Citation Press, with Morphet and Charles O. Ryan as co-editors of the first three, and Morphet and David L. Jesser as co-editors of the remainder.

Vol. 1. Prospective Changes in Society by 1980. N.Y.: Citation, 1967. 268 pp. (16 articles by non-educators.)

Vol. 2. Implications for Education of Prospective Changes in Society. N.Y.: Citation, 1967. 323 pp. (20 articles, largely by professional educators, in response to Vol. 1.)

Vol. 3. Planning and Effecting Needed Changes in Education. N.Y.: Citation, 1967. 317 pp. (26 articles, largely by professional educators, on planning for and effecting change in schools, school systems, metropolitan areas, and at the state level.)

Vol. 4. Cooperative Planning for Education in 1980: Objectives, Procedures, and Priorities. N.Y.: Citation, 1968. 105 pp. (Four worthwhile articles concerned with prospective social change and the implications for educational planning.)

Vol. 5. Emerging Designs for Education. Denver: Designing Education for the Future, May 1968. 240 pp. (Four articles on implications of societal changes for the educational program, alternative local school district models, and alternative models for state financing.)

Vol. 6. Planning for Effective Utilization of Technology in Education. Denver: Designing Education for the Future, August 1968. 372 pp. (32 articles, many of them from representatives of potential supplying organizations.)

Vol. 7. Preparing Educators to Meet Emerging Needs. Denver: Designing Education for the Future, 1969.

222. MORSE, Arthur D. Schools of Tomorrow--TODAY! Albany: University of the State of New York, State Education Department, 1960. 191 pp.

Nine case studies representing "a cross-section of experimentation" which promises "to lift the level of American education" via team teaching, classroom aides, non-graded schools, television, etc.

223. MUSGRAVE, G. Ray. The Grading Game. N.Y.: Vantage Press, 1970.

"Asks that we change the current basis of grading public school pupils to salvage U.S. education." (advt.)

224. NEILL, A. S. Summerhill: A Radical Approach to Child Rearing. With a

Foreword by Erich Fromm. N.Y.: Hart Publishing Co., 1960. 392 pp. $1.95 paper.

The founder of the world-famous Summerhill school, started in 1921 in Suffolk, England, discusses his school, child rearing, sex, religion and morals, children's problems, parents' problems, and various questions that have been asked of him over the years. Perhaps needless to say, the school is established on the principles of freedom and nonrepression, with discipline self-imposed by the pupils.

225. Summerhill: For and Against. N.Y.: Hart Publishing Co., 1970. 271 pp. $1.95 paper.

15 critiques, purporting to cover the spectrum of present-day thinking on education, including the comments of John Culkin, Erich Fromm, Paul Goodman, Fred Hechinger, John Holt, Ashley Montagu, Max Rafferty, etc.

226. NESBITT, Marion. A Public School for Tomorrow. N.Y.: Delta Books, 1969 (?). $1.95 paper.

"Traces the day-to-day activities of the renowned Maury School in Richmond, Va., a public school that exemplifies learning integrated with daily living, creating an environment where every child can grow toward self-realization." (advt.)

227. DENNISON, George. The Lives of Children: The Story of the First St. School. N.Y.: Random House, 1969. 308 pp.

Concerns a mini-school of 23 pupils and four teachers in NYC lower east side, short-lived due to funding problems. Shows what can be done in open schooling--and what isn't being done.

228. Sudbury Valley School. The Crisis in American Education: An Analysis and A Proposal. Framingham, Mass.: The Sudbury Valley School Press (Winch Street), 1970. 109 pp. $1.50.

"This book presents the action and thought which brought forth The Sudbury Valley School, and will bring forth other schools like it throughout the country." A bold new solution is proposed to overcome "Our Un-American Schools: . . . for education in America today, the grand strategy must be to make the schools the embodiment of the American Dream for young and old alike--to make the schools bastions of Individual Rights, Political Democracy, and Equal Opportunity for all people and for all time." (p. 45) The Sudbury Valley School opened in July 1968 as a day school for students aged four years and up . . . "a prototype democratic school for all to see and to study." The second step in the tactic of change is to establish satellite public schools, culminating finally in public schools with public support. RECOMMENDED

229. FEATHERSTONE, Joseph. "Schools for Children: What's Happening in

British Classrooms," The New Republic, August 19, 1967; "How Children Learn," The New Republic, September 2, 1967; "Teaching Children to Think," The New Republic, September 9, 1967.

An important series that introduced the British experience with "informal schooling" to the United States. Also see, Charles E. Silberman, Crisis in the Classroom (Item 243), who devotes a long chapter (pp. 207-264) to "The Case of the New English Primary Schools" as a model for how the schools should be changed.

230. POSTMAN, Neil. "Once Upon a Time--A Fable of Student Power," The New York Times Magazine, June 14, 1970, pp. 10-11.

Although brief, this delightful scenario describes a very clear alternative to schooling that was put into effect during an officially declared state of emergency in New York City. The Emergency Education Committee developed a curriculum for all children in the 7th-12th grades, known as Operation Survival, obliging them to clean up neighborhoods, beautify the city, direct traffic (freeing the police to fight crime), deliver mail, maintain day-care centers, tutor elementary school students, publish neighborhood newspapers, assist in hospitals, register voters, substitute for certain adults whose jobs the students could perform without injury or loss of efficiency (thus freeing the adults to attend school or assist students in saving the city) and, with the aid of college students, conducting an auxiliary public transportation system (thereby reducing auto traffic). Consequently, young people assumed a proprietary interest in their environment and came to be respected by the old, leading to a revival of courtesy and a decrease in crime. "Amazingly, most of the students found that while they did not 'receive' an education, they were able to create a quite adequate one." Difficulties developed, however, from teachers who felt their training to be wasted, and the inability to tell dumb children from smart children due to the cessation of testing. "But the Mayor . . . promised that as soon as the emergency was over everything would be restored to normal. Meanwhile, everybody lived happily ever after--in a state of emergency, but quite able to cope with it." RECOMMENDED

231. POSTMAN, Neil and Charles WEINGARTNER. Teaching as a Subversive Activity. N.Y.: Delacorte, 1969. 219 pp. $5.95.

Perhaps intentionally, the title of this loosely organized book is ambiguous, for the aims of transmitting dead ideas, values, metaphors, and information, and creating smoothly functioning bureaucrats "are truly subversive since they undermine our chances of surviving as a viable, democratic society." (p. 15) But the authors advocate the subversion of these attitudes, beliefs, and assumptions that foster our many social problems. Based on the ideas of McLuhan, Wiener, Goodman, Gardner, Watson, Rogers, Sapir, Whorf, and Korzybski, the "inquiry method" is recommended (with the "reality curriculum" and "games curriculum" as alternatives), so that "all students develop

built-in shockproof crap detectors as basic equipment in their survival kits." (p. 218) Many other ideas are offered--such as abolishing textbooks, courses, and grades--and some may appear overly romantic, such as reproducing graffiti for the school halls as feedback to the slogans of administrators. But are these reforms subversive or counter-subversive?

232. PARKER, Don H. Schooling for What? Sex, Money, War, Peace. N.Y.: McGraw-Hill, 1970.

233. POWLEDGE, Fred. To Change a Child: A Report on the Institute for Developmental Studies. N.Y.: Quadrangle, 1968. 117 pp. $5.50.

"An in-depth portrait of a program for a basic rearrangement of education, including massive intervention by society into the early life of a slum child." (advt.)

234. President's National Advisory Commission on Rural Poverty. The People Left Behind. Washington: GPO, September 1967. 160 pp.

Chapter 5 lists 33 recommendations for changing educating systems so that rural citizens may be better equipped to participate in the modern world.

235. RAFFERTY, Max. Classroom Countdown: Education at the Crossroads. N.Y.: Hawthorn Books, 1970. $5.95.

Citizen concern and common sense advocated "for every one of today's educational crises--from the morality gap and hippie invasion to pot and integration" in order to "save our most important possession, our children."

236. RAFFERTY, Max. Suffer, Little Children. N.Y.: Devon-Adair, 1962. 166 pp.

Ringing rhetoric from the widely-known conservative ex-California educator, premised on education's duty "to make possible the survival of our country." The one great problem in American education is seen as "the tragedy of declining standards." (p. 32) After attacking the "Progressive Blight," "The Cult of the Slob," "The Philistines," conformity and other fancied and real targets, it is announced that "Within the last year or two, we have witnessed the beginning of the Conservative Revolution in education." (p. 154) Rafferty appears to be the only witness to this event.

237. REPO, Satu (ed.). This Book is About Schools. Introduction by Herbert Kohl. N.Y.: Pantheon, 1970. 457 pp. $7.95.

26 articles from This Magazine is About Schools: "a mixed bag of diverting criticisms, practical visions, and handy guerilla tactics for teachers, students, and parents." (cover)

238. ROBINSON, Thorington P. The Implication of Selected Educational Trends for Future School Systems. Santa Monica: System Development Corporation, January 1968. SP-3046. 94 pp.

An extrapolation of two major trends: 1. The trend toward the assumption by the schools of tasks and responsibilities previously undertaken by the family, other public agencies, and industry; and 2. The trend toward providing individualized education to all school students. Based on these trends, two skillfully constructed and plausible scenarios are presented.

239. ROLLINS, Sidney P. Developing Nongraded Schools. Itasca, Illinois: Peacock, 1969. 269 pp.

"Pleads for a child-centered curriculum, a technologically augmented teacher force, and an architecture pertinent to individual differences and intellectual flexibility . . . envisions a twenty-first century utopian, computer-assisted, machine-recorded school system." (Saturday Review, April 19, 1969, p. 72.)

240. SCHRAG, Peter. Voices in the Classroom: Public Schools and Public Attitudes. Boston: Beacon Press, 1965. 292 pp.

Portraits of schools in ten American communities, ranging from Newton, Mass. (where education is the "basic industry") to Perry County, Ky., Macon, Ga., and Chicago. A concluding chapter advocates "the 'open school'--an institution receptive to ideas and suggestions from all sources and prepared to expand its horizons to cope with the social and economic problems which affect education in the classroom." (book jacket)

241. SEARLES, John E. A System for Instruction. Scranton, Pa.: International Textbook Co., 1967. 170 pp.

"This volume is written for those who will be practicing instruction in the new world of the 1970s and beyond." (p. 3) Author makes a feeble attempt to address his textbook to "The World of the Twenty-First Centry" (pp. 10-14) and provides a scenario of "The Classroom of the Year 2000" (pp. 15-18). Although ignorant of futures literature, this is at least an attempt to address a narrow but important concern to a changing world.

242. SHANE, Harold G. "Future Shock and the Curriculum," Phi Delta Kappan, October 1967, pp. 67-70.

An educator's prescriptions for facing the future: in-service training programs, lifetime curricula, comprehensive self-realization centers, reversing emphasis on upper levels of education, annexing content from other fields, etc. Brief, readable, and perhaps a good focus for discussion.

243. SILBERMAN, Charles E. Crisis in the Classroom: The Remaking of American

Education. N.Y.: Random House, Fall 1970. 525 pp. $10.00.

Based on a three and one-half year study commissioned by the Carnegie Corporation, this broad indictment of all levels of education is based on a thorough review of the literature, extensive interviews and correspondence with educators and critics, and first-hand investigation in more than 100 schools by the author and in about 150 more schools by his three-member staff.

Silberman finds the schools to be "intolerable," severely afflicted by "mindlessness," operating on the assumption of distrust, offering a banal and trivial curriculum, and preoccupied with order and control (which in turn creates discipline problems, rather than eliminating them). More than 200 examples of school practice are provided in support of these charges, which are no less severe than those made by the so-called "romantic" critics of the past decade.

Based on an analysis of the superiority of English primary schools, "informal education" (also known as free schools, open learning systems, etc.) is strongly advocated. RECOMMENDED

244. SHERMAN, Vivian S. Two Contrasting Educational Models: Applications and Policy Implications. Menlo Park, Calif.: Educational Policy Research Center at Stanford, Research Memorandum EPRC-6747-9, September 1970. 138 pp.

An extensive analysis of structured or closed systems vs. open systems, with extensive documentation from the behavioral sciences in support of the latter alternative. Advocates "Quantum leap experimentation with innovative subsystems based on images of man, a metamodel of a guided dialectic between structure and openness (process model for more gradual system modification), and selected adjunct strategies to serve as necessary lubricants for both short- and long-range changes." (p. 100)

245. TICKTON, Sidney G. and Ronald GROSS. Major Problems Facing Public Schools in the Seventies. N.Y.: Academy for Educational Development, March 1968. 45 pp. mimeo. (Prepared for the Commission on Trends and Perspectives of the United States Chamber of Commerce.)

Brief descriptions of major problems (goals, control, financing, curriculum, teachers and teaching, facilities, equality, evaluation, and innovation) with outlines of alternative approaches toward solving each of them. A clearly written overview. RECOMMENDED

246. UMANS, Shelley. The Management of Education: A Systematic Design for Educational Revolution. Garden City: Doubleday, 1970. 226 pp. $5.95.

The Director of the Center for Innovation of the NYC Board of Education discusses PPBS, change models, educational programs of industry and government, and various trends in electronic media. Advocates a

(cont'd)

new educational system, "incorporating only those elements of education that have proven to be important." (p. 23) The "Blueprint for the Future" envisions the total community as the school, with the school building of today just one small station, along with educational environment centers (neighborhood facilities offering a full range of services for all people at all times), satellite development centers, block schools, skills centers, and the "'No School' School." RECOMMENDED

247. U.S. Congress. House Committee on Education and Labor, General Subcommittee on Education. Needs of Elementary and Secondary Education for the Seventies: A Compendium of Policy Papers. Washington: USGPO, Committee Print, March 1970. 982 pp.

"The first section of the compendium consists of essays which have been prepared at the invitation of the Subcommittee by a distinguished group of more than a hundred university faculty members and administrators, industrialists and businessmen, journalists, social philosophers, professional educators, educational researchers, scientists, and other prominent citizens, reflecting perhaps every shade of opinion about education. They have been asked both to predict what will be the compelling issues of the seventies and beyond and to suggest potentially fruitful alternatives. The choice of specific topics, however, has been left to the individual writers.

"The second section of the anthology is comprised of the formal statements which were submitted by witnesses when they testified at the Subcommittee hearings.

"This collection of papers represents perhaps the most extensive survey of the educational needs of the seventies that has been attempted to date." (Foreword by Congressman Roman C. Pucinski, p. v.)

Such a self-assessment can only be heartily seconded. This document is a gold mine, a non-indexed encyclopedia of alternatives. RECOMMENDED

248. U.S. Congress. Senate Committee on Labor and Public Welfare, Special Subcommittee on Indian Education. Indian Education: A National Tragedy--A National Challenge. Washington: USGPO, November 1969. 220 pp. $1.00.

The work of the Subcommittee, chaired by Sen. Edward Kennedy, fills 4,077 pages in 7 volumes of hearings and 450 pages in 5 volumes of committee prints. This report is a condensation, concluding with 60 recommendations for action. "We are shocked at what we discovered . . . We have concluded that our national policies for educating American Indians are a failure of major proportions. They have not offered Indian children--either in years past or today--an educational opportunity anywhere near equal to that offered the great bulk of American children." (p. xi)

B. Curriculum

249. GOODLAD, John I. The Changing School Curriculum. N.Y.: Fund for the Advancement of Education, 1966. 122 pp.

An authoritative summary of changes in curricula marked by updating of content, reorganization of subject matter, and new methods. RECOMMENDED

250. BERMAN, Louise M. New Priorities in the Curriculum. Columbus, Ohio: Charles E. Merrill Publishing Co., 1968. 241 pp. Bib., pp. 197-238.

A well-researched proposal "to open up the possibility of the development of process-oriented persons within our schools." Each chapter discusses a process and the need for it: perceiving, communicating, loving, decision-making, knowing, organizing, creating, and valuing. Bibliography of about 600 items. RECOMMENDED

251. WESTIN, Allen F. et. al. Civic Education in a Crisis Age: An Alternative to Repression and Revolution. N.Y.: Columbia University, Center for Research and Education in American Liberties. September 1970. 27 pp.

Finds that a large majority of nearly 7000 junior and senior high school students surveyed feel they are regularly subjected to undemocratic decisions, and proposes ten objectives for civic education. RECOMMENDED

252. MICHAELIS, John, Ruth GROSSMAN, and Lloyd SCOTT. New Designs for the Elementary School Curriculum. N.Y.: McGraw-Hill, 1968. 428 pp.

"Presents an up-to-date view and an understanding of important developments in all the subject areas of the elementary curriculum. Also provides some guidelines for those who plan curricula." (advt.)

253. UMANS, Shelly. New Trends in Reading Instruction. N.Y.: Teachers College Press, 1963. 145 pp.

254. FENTON, Edwin. The New Social Studies. N.Y.: Holt, Rinehart & Winston, 1967. 144 pp.

An historian's report on recent curricular changes.

255. BRUBAKER, Dale L. Alternative Directions for the Social Studies. Scranton, Pa.: International Textbook Co., 1967. 63 pp.

256. TAYLOR, Harold (ed.). The Humanities in the Schools: A Contemporary Symposium. N.Y.: Citation Press, 1968. 176 pp. $2.65.

Papers presented at a University of Kentucky conference. Especially see "Films and the Future" by Stanley Kaufmann.

257. "The Future and Aesthetic Education" (Special Issue), Journal of Aesthetic Education, 4:1, January 1970. (Single copies for $2.25 from University of Illinois Press, Urbana.)

258. Advisory Council on Vocational Education. Vocational Education: The Bridge Between Man and His Work. General Report of the Advisory Council. Washington: U.S. Office of Education. November 1968. 220 pp. $2.25.

Part I reviews growth and development, financing, administration, research, teacher education, vocational guidance, supporting services, and contemporary local programs. Part II deals with achievements and limitations, social and manpower environments of vocational education, and innovations and new directions (including an excellent summation of 15 trends on p. 191). It is concluded that "there is a growing recognition that far too many youths are leaving school inadequately prepared to enter the labor market and that the schools must assume the responsibility for the vocational preparation for a much larger portion of the school population than they are now accommodating." (p. 193) Part III offers 23 legislative recommendations (including the formation of a Department of Education and Manpower Development at the Cabinet level), and three administrative recommendations directed to the Commissioner of Education (including the establishing of a Learning Corps). RECOMMENDED

259. Panel of Consultants on Vocational Education. Education for a Changing World of Work. Report of the Panel Prepared at the Request of the President of the United States. Washington: U.S. Office of Education, OE-80021, 1963. 296 pp. $1.25.

Offers a plethora of recommendations for expanding vocational education.

260. The Report of the Commission on Obscenity and Pornography. N.Y.: Bantam Books, October 1970. 700 pp. $1.65. (also in Random House hardcover)

The three positive approaches recommended for the development of healthy attitudes toward sexuality entail sex education, industry self-regulation, and citizen action groups. The analysis of existing programs and the recommendation for expanded programs for both children and parents appears on pp. 33-37 and pp. 311-329. "There is a considerable gap between what the schools are presently teaching and what the students wish they would teach." (p. 322)

261. BREASTED, Mary. Oh! Sex Education! N.Y.: Praeger, 1970. $7.95.

A journalist's candid and witty look at both sides of a highly emotional issue.

262. U.S. Department of Health, Education, and Welfare, National Institute

of Mental Health. How to Plan a Drug Abuse Education Workshop for Teachers. Washington: USGPO, Public Health Service Publication No. 1162 (or No. 1962--both numbers listed in different places), November 1969. 35 pp. $.25.

Although largely a parochial how-to-do-it manual, there are several "concepts" for effective education that should be heeded in this important and highly sensitive area of contemporary concern: distinguishing between drug use and abuse, considering that we live in a drug-using society, avoiding untruths, exaggeration, sensationalism, and moralizing, and recognizing that "some drug use in school presumably stems from disaffection with the educational process." It is important that schools do not inadvertently aggravate the problem: "Educational efforts that do not cover the entire spectrum of drugs, including tobacco and alcohol, strike students as examples of adult hypocrisy and deafen young ears." (p. 1) An annotated bibliography of 26 items is provided.

263. GRABMAN, Arnold B. The Changing Classroom: The Role of the Biological Sciences Curriculum Study. Garden City: Doubleday, 1969. 370 pp. $6.95.

According to the author, there were 235 curriculum studies in science and mathematics in 1968, of which about 120 were in the U.S. This scholarly history of one such study, the BSCS, is "for anyone interested in reshaping the schools in which he teaches or in which his children are taught." (back cover) Grabman concludes that "a promising method for our time is to develop an inquiry-oriented instruction" (p. 291), and, in looking at the pattern of development of the products of the BSCS, it is noted that "one could predict a fully articulated teaching-learning program in the biological sciences for the total school years." (p. 293)

264. BOOCOCK, Sarane S. and E. O. SCHILD. Simulation Games in Learning. Beverly Hills, Calif.: Sage Publications, 1968. 279 pp.

Intended for educational practitioners and behavioral scientists as "an introduction to a new and, we believe, powerful educational technology" (p. 13). Part IV, "Perspectives for the Future" discusses political science games in the problem-solver state, the Life Career Game, and some implications of gaming for the school system.

265. ABT, Clark B. Serious Games. N.Y.: Viking, 1970. 176 pp. $5.95.

General view of improving education with games, with emphasis on games for the physical and social sciences, disadvantaged groups, occupational choice, and planning and problem solving.

266. CLARK, Jere W. and Juanita S. CLARK (eds.). Systems Education Patterns on the Drawing Boards for the Future. Highlights of The Second Annual National Conference on General Systems Education. New Haven:

(cont'd)

Southern Connecticut State College, Center for Interdisciplinary Creativity. April 1969. 42 pp.

Addressed to the problem of information overload, this conference of educators, representatives of industry and government, and systems theorists was convened "to explore possibilities for major curriculum surgery, particularly in the area of the social sciences." Advocates conceptual skills for the future, based on the holistic systems approach.

267. DUNSTAN, Maryjane and Patricia W. GARLAN (eds.). Worlds in the Making: Probes for Students of the Future. Englewood Cliffs: Prentice-Hall, 1970. 370 pp. Paper, $4.95.

A textbook/anthology of writings, poems, cartoons, and art dealing with the future. Questions are periodically inserted to stimulate student thinking.

C. Governance

268. KOERNER, James D. Who Controls American Education? A Guide for Laymen. Boston: Beacon Press, 1968. 210 pp. $2.45 paper.

After a pithy discussion of the federal government, teacher organizations, other national organizations, state government, and statewide groups, Koerner concludes that "all in all, I think our chances are reasonably good of restoring both the teacher and the scholar to a prominent role in educational policy, but not very good for restoring the layman to a position of primacy. Desirable as the latter reform may be, we must face the fact that the main currents of American educational development are flowing mostly away from the ordinary citizen and toward a new coalition of specialists--school administrators, classroom teachers, academicians, federal and state educational officials, along with an assortment of other kinds of specialists (foundation, testing, accrediting, and manufacturing-publishing executives) that I have discussed. Laymen will probably attain a greater voice in inner-city education, but no one can predict with what results; nor is there any reason to think that the lay role will enlarge in other educational areas.

"The new order will be better than the old, if for no other reason than the fact that it will be less insular than the old, better educated itself, and more representative of the entire educational community." (pp. 173-174)

Although otherwise an excellent overview of who controls what, Koerner (like others up until recent developments have forced the issue into consciousness), fails to make any mention of student power as a--if not the--most potent force for change.

269. BENDINER, Robert. The Politics of Schools: A Crisis in Self-Government.

N.Y.: Harper & Row, 1969. 240 pp. $6.95.

A political reporter's cogent account of American school boards and their declining capacity to govern, with various alternatives considered. State control is seen as undesirable for various reasons, and there is little danger (or hope) of the federal government taking over. Decentralization ("The Desperate Throwback") would intensify segregation and inequality. In the final chapter, school unification is advocated, for "the bigger the arena, the less provincial and one-sided the politics that prevail" (p. 210), and Toronto's Metro concept of federation is held up as a successful model.

270. IANNACCONE, Lawrence. Politics in Education. N.Y.: The Center for Applied Research in Education, 1967. 112 pp.

Employing a general systems approach, the author discusses politics preferred by pedagogues, the changing state politics of education, and change and local district politics. The final chapter on the future suggests that the educational politics to come may be far more open than heretofore, with more fragmentation patterns in the immediate offing due to organized teacher militancy.

271. ZIEGLER, Harmon L., Jr. The Politics of Education. Indianapolis: Bobbs-Merrill, Spring 1971.

272. Syracuse University Research Corporation, Policy Institute. Disruption in Urban Public Secondary Schools. Syracuse: SURC Policy Institute (723 University Ave.), August 1970. 61 pp. + Appendices. (Prepared for USOE)

A broad survey of the literature combined with 27 on-site visits and 683 usable questionnaires. Of the urban high schools surveyed, 85% experienced some type of disruption during the last three years, and disruptions were found to be more frequent in racially integrated schools. The traditional punitive methods of dealing with disruptions (expulsion, arrest, in-school detention, etc.) are seen as often producing counter-productive results. Many remedies are proposed, including overcoming bigness, recruiting and promoting black personnel, special schools for disruptive students, utilizing young adult security personnel, etc. RECOMMENDED

273. FISH, Kenneth L. Conflict and Dissent in the High School: An On the Scene Analysis. N.Y.: Bruce Publishing Co., 1970. $6.95.

"A comprehensive, nationwide study of student unrest by a high school principal for the National Association of Secondary Schools under a grant from the Ford Foundation. A first hand report on why eruptions occur with recommended action for the future." (advt.)

274. DIVOKY, Diane. "Revolt in the High Schools: The Way It's Going to Be," Saturday Review, February 16, 1969.

(cont'd)

Discusses the spread of the underground high school press to form a network of nearly 500 papers, and the growth of activist organizations on the high school level. Somewhat obsolete by now.

275. LURIE, Ellen. How to Change the Schools: An Action Handbook for Parents Who Want to Fight the System. N.Y.: Random House, January 1971. 280 pp. (Also Vintage paper, October 1970, $2.95.)

Discusses recruitment and evaluation of teachers, how to get rid of incompetent teachers, and how to reform the curriculum.

276. LIEBERMAN, Myron. The Future of Public Education. University of Chicago Press, 1960. 294 pp.

A competent critic discusses trends with a fiery denounciation of the status quo--especially local control of education. A "revolution" is predicted (and advocated) in terms of a changing power distribution toward greater teacher control (student power not considered, however). Otherwise, little to do with the future.

277. LEVIN, Henry M. (ed.). Community Control of Schools. Washington: Brookings Institution, Studies in Social Economics, 1970. 318 pp. $7.50.

278. FEIN, Leonard J. Schools and Community Control. N.Y.: Pegasus, February 1971. $6.95; $1.95 paper.

279. AGGER, Robert and Marshall N. GOLDSTEIN. Who Will Rule the Schools? A Cultural Class Crisis. Belmont, Cal.: Wadsworth Publishing Co., 1970. 210 pp.

280. FANTINI, Mario, Marilyn GITTELL, and Richard MAGAT. Community Control and the Urban School. Introduction by Kenneth B. Clark. N.Y.: Praeger, July 1970. 288 pp. $7.95; $2.95 paper.

"A comprehensive study of the participation issue in urban public schools. Tracing the development of public education and the bureaucratization of school systems since the 1900's, the authors examine where and for whom the attempt to provide universal education failed. They offer a persuasive case for community control as a means of achieving the participation they consider to be an intrinsic part of the education process." (advt.)

281. WASSERMAN, Miriam. The School Fix, NYC, USA. N.Y.: Outerbridge and Dienstfrey, 1970. 568 pp. $10.00.

Describes the inner workings of a New York City public school, interpreted in terms of a conspiracy theory against the poor, and advocates community control as a necessary response.

D. Urban Schools

282. DOWNS, Anthony. Urban Problems and Prospects. Chicago: Markham Publishing Co., October 1970. 293 pp. $7.95; $3.95 paper.

Eleven essays, including Alternative Forms of Future Urban Growth in the U.S., Alternative Futures for the American Ghetto, Racism in America and How to Combat It, A Realistic Look at the Final Payoffs from Urban Data Systems, and Competition from Community Schools.

283. GLAZER, Nathan (ed.). Cities in Trouble. A New York Times Book. N.Y.: Quadrangle, 1969. 256 pp. $6.95.

"Commentators on urban affairs dissect the components of the crisis: schools, blacks, immigrants, crime and violence, jobs, political corruption, welfare, labor unrest, and the physical environment . . . asks tough questions and offers realistic answers." (advt.)

284. CANTY, Donald. A Single Society: Alternatives to Urban Apartheid. N.Y.: Praeger, 1970. 192 pp. $5.95; $2.45 paper.

"Offers a national strategy for implementing our commitment to a just and fair society, delineates specific programs in the areas of jobs and income, housing and environment, and education and social welfare, and analyzes long-range plans to break the pattern of ghetto separation." (advt.)

285. HODGE, Patricia Leavy and Philip M. HAUSER. The Challenge of America's Metropolitan Outlook, 1960 to 1985. Prepared for The National Commission on Urban Problems. N.Y.: Praeger, 1968. 90 pp.

Two prominent demographers project the further suburbanization in Standard Metropolitan Statistical Areas, and the growing concentration of nonwhites in central cities. "The problems facing the central city schools--especially in respect to integration--are highlighted by an anticipated almost doubling (92 percent) of nonwhite youngsters under 15, while corresponding white youth would diminish by 8 percent." (p. 55) "The projections clearly indicate that the present 'urban crisis' is likely to be greatly exacerbated in the coming years and that serious difficulties will face the nation in respect to intergroup relations, education, employment, housing, and provisions for the aged." (p. 57)

286. BANFIELD, Edward C. The Unheavenly City: The Nature and Future of Our Urban Crisis. Boston: Little, Brown, 1970. 308 pp. $6.95.

A social scientist's sophisticated, hard-nosed, and gloomy analysis of urban problems in the light of scholarly findings. "So long as the city contains a sizable lower class, nothing basic can be done about its most serious problems." (p. 210) "It is impossible to avoid the conclusion that the serious problems of the cities will

continue to exist in something like their present form for another twenty years at least." (p. 255) Present programs are seen as prolonging these problems and perhaps making them worse. In part this is due to false definitions of the situation, perpetuating a "reign of error," e.g., defining so many situations as "critical." In Chapter 7, "Schooling vs. Education," Banfield advocates lowering the school-leaving age to 14 to get non-learners out of school and therefore stop their anti-education, and the possibility of school districts contracting with industry for job training. Possibilities for changing schooling are not considered. In Chapter 10, various alternatives to free children from the grip of lower-class culture are explored, such as state removal from parents, boarding schools, and day nurseries--but little hope is offered here or in other areas, other than the possibility of replacing the conventional wisdom of do-gooding over the next decade or two as a consequence of social science brought to bear on policy questions.

287. National Advisory Commission on Civil Disorders. Report of the National Advisory Commission on Civil Disorders. Special introduction by Tom Wicker. N.Y.: E. P. Dutton and Bantam Books, March 1968. 609 pp.

Based on Chapter 16 ("The Future of the Cities"), Chapter 17 ("Recommendations for National Action") contains an excellent survey of inner city education, with many proposals for reform. (pp. 424-457) RECOMMENDED

288. CONANT, James Bryant. Slums and Suburbs: A Commentary on Schools in Metropolitan Areas. N.Y.: McGraw-Hill, 1961. 147 pp.

A well-known book covering Negro education, schools and jobs, curriculum, and contrasts between slum schools and the college-oriented suburban schools. Concludes with 17 recommendations, including the warning that "social dynamite is building up in our large cities." (p. 146) The explosion occurred six years later.

289. GREEN, Thomas F. "Schools and Communities: A Look Forward," Harvard Educational Review, Spring 1969.

A philosopher's discussion of school-community relationships in the 1980-1990 period, focused on both change and continuity.

290. Community and the Schools. Harvard Educational Review, Reprint Series No. 3, June 1969. 176 pp. $3.50.

Seven recent articles examining the past and future of community schools, community control, and the possibilities of a new community.

291. HAVIGHURST, Robert J. (ed.). Metropolitanism. Its Challenge to Education. Sixty-Seventh Yearbook of the National Society for the Study of Education, Part I. University of Chicago Press, 1968. 393 pp.

16 Articles in five sections: the metropolitan setting; organizing, staffing, and financing education in metropolitan areas; metropolitan education and local state, and national government; developments and problems in metropolitan areas; and metropolitan frontiers (examples from Hartford, Nashville, and the Twin Cities).

292. HAVIGHURST, Robert J., Frank L. SMITH, Jr., and David E. WILDER. A Profile of the Large City High School. Washington: National Association of Secondary School Principals, 1970.

A study of 700 high schools in 45 cities with more than 300,000 population, recommending new approaches such as a single experimental high school at a central location, temporary shifting of faculty to provide more racial integration and distribution of experience, allowing students to divide attendance among two or more schools, employing an open attendance rule allowing inner-city students to enroll in comprehensive or middle-class schools, and constructing one or more large high schools in a kind of educational park enabling greater diversity of students.

293. Report to the President of the Urban Education Task Force.

An underground document of sorts, prepared by a task force headed by Wilson C. Riles, newly elected Superintendent of Public Instruction in California. Excerpts have appeared in the Congressional Record for January 19, 1970, and, according to Tom Wicker, it has been published in full by Praeger. (New York Times, November 8, 1970, Section 4, p. 13.) Proposes an increase in funding of about 50% per pupil in city schools, and takes a critical attitude toward the professional educational establishment.

294. BERNSTEIN, Abraham. The Education of Urban Populations. N.Y.: Random House, 1967. 398 pp. $3.95, paper.

"A new type of introductory education text, aimed at a new kind of teacher-candidate, and intended for new circumstances in education." (p. vii) Analyzes minority problems and suggests specific methods recognizing and utilizing minority backgrounds. Bernstein advocates stipends to pupils; an extended school day, week, and year; the recruitment of a new type of teacher; and necessary changes in administrative attitudes and training programs.

295. STREET, David (ed.). Innovation in Mass Education. N.Y.: Wiley-Interscience, 1969. 342 pp.

Eleven articles on urban education dealing with inner city experimentation, nongrading in a slum school, controlling behavior problems, urban teacher education, community action programs and school systems, nonprofessionals, conflict over educational change, IQ scores, and institution building.

296. National Education Association. Schools of the Urban Crisis. Washington: NEA, 1969. 58 pp.

Advocates that the federal government pay at least one-third of the cost of public schooling in major cities.

297. PRESSMAN, Harvey. New Schools for the Cities: Designs for Equality and Excellence. A Working Paper. Prepared for the Citizens Crusade Against Poverty. Washington: New Community Press, 1970. 48 pp.

298. RUDMAN, Herbert C. and Richard L. FEATHERSTONE (eds.). Urban Schooling. N.Y.: Harcourt, Brace & World, 1968. 320 pp.

"Ten experts discuss the problems of inner-city education and set forth a plan for cooperation between urban universities and urban school systems." (advt.)

299. FANTINI, Mario D. and Milton A. YOUNG. Designing Education for Tomorrow's Cities. N.Y.: Holt, Rinehart and Winston, 1970. 160 pp., paper.

Present educational systems are found to be outmoded and inadequately structured (has anyone yet to find them adequate?), and, as a suggestion for strategies of major reform, the authors use the development of the Fort Lincoln New Town school system in Washington, D.C. as a case study.

300. FANTINI, Mario and Gerald WEINSTEIN (eds.). Making Urban Schools Work: Social Realities and the Urban School. N.Y.: Holt, Rinehart & Winston, 1969. 62 pp. $1.50.

Proposes a school that would allow children to examine urban stresses and learn how to deal constructively with them.

301. FANTINI, Mario D. and Gerald WEINSTEIN. The Disadvantaged: Challenge to Education. N.Y.: Harper & Row, 1968. 455 pp.

302, MARCUS, S. and H. N. RIVLIN (eds.). Conflicts in Urban Education. N.Y.: Basic Books, 1970. $6.95.

303. CAMPBELL, Roald F. et. al. (eds.). Education and Urban Renaissance. N.Y.: John Wiley, 1969. 148 pp.

304. GITTELL, Marilyn and Alan G. HEVESI (eds.). The Politics of Urban Education. N.Y.: Praeger, 1969. 386 pp.

A reader presenting a timely selection of urban reform proposals. Five articles particularly concerned with community control of the schools.

305. GITTELL, Marilyn and T. Edward HOLLANDER. Six Urban School Districts:

A Comparative Study of Institutional Response. N.Y.: Praeger, 1968.

A comparative analysis of fiscal and administrative operations of school systems in Baltimore, Chicago, Detroit, New York, Philadelphia, and St. Louis, "suggesting some new approaches for evaluation of large city school systems" by using innovation as an output. Bibliography of about 250 unannotated entries on school administration and the politics of education.

306. GITTELL, Marilyn (ed.). Educating an Urban Population. Beverly Hills, Cal.: Sage Publications, 1970 (?). 320 pp. $8.95; $3.95 paper.

"Presents a cross-section of current social research and thinking on the problems of urban education within a framework of concern for the broader implications of urban development and the policy-making process. Among the contributors: Seymour Sacks, Robert J. Havighurst, Charles Glatt, Alan K. Campbell, Louis H. Masotti, Werner Z. Hirsch, David Minar, and Thomas F. Pettigrew." (advt.)

307. SIZER, Theodore R. "Education in the Ghetto: The Case for a Free Market," Saturday Review, January 11, 1969.

The Dean of the Harvard School of Education discusses four alternatives (decentralization, public money for minority private schools, contracting for texts and teachers in certain areas, and giving public money directly to children). All of these programs would directly increase competition. Other interconnected policies are advocated, such as discrimination in favor of poor children and integration, equalization of state financial resources, discrimination in favor of imaginative schools and school districts and the development of national and independent "consumers' unions" to evaluate school materials and industrial contractors' plans.

308. SMILEY, Marjorie B. and Harry L. MILLER (eds.). Policy Issues in Urban Education. N.Y.: Free Press, 1968. 490 pp.

A companion volume to Miller and Smiley, Education in the Metropolis (N.Y.: Free Press, 1967). Various readings divided into three sections: Challenge to the Teacher, What Curriculum for the Disadvantaged?, and Redressing the Imbalance of the Urban School.

309. THOMAS, Thomas C. On Improving Urban School Facilities and Education. Menlo Park: Stanford Research Institute, Educational Policy Research Center, Policy Research Report EPRC-6747-1, May 1969. 126 pp.

An examination of education parks, mini-schools (storefronts), and neighborhood schools in terms of the reactions by the following stakeholders: white liberals, pro-integration blacks, pro-local control blacks, and teachers. It is concluded that "For different reasons, neither of the two facility innovations--education parks and mini-schools--offer much promise to urban education. One probably should

(cont'd)

not be implemented, and the other probably will not be implemented. Neighborhood schools will most likely remain the choice of most school districts." (p. 125) Nevertheless, "There will be considerable educational change over the next decade, though it may be cloaked in violence." (p. 126)

E. Facilities and Technology

310. TOFFLER, Alvin (ed.). The Schoolhouse in the City. N.Y.: Praeger, 1968. 255 pp.

Sponsored by Stanford and Educational Facilities Laboratories, 21 authors offer answers on urban school construction problems, present case studies of developments in three cities (educational parks in Baltimore and Pittsburgh; Linear City in Brooklyn), and project the possible future of the schoolhouse in the city.

311. Educational Facilities Laboratories. Schools Without Walls. N.Y.: EFL (477 Madison Ave.), June 1965. 56 pp. Free.

Many examples in print and photographs of "open-space schools" that provide unbroken space containing anywhere from three to five regular-size groups of children and their teachers: "an educational process unbound by the barriers built into the conventional schoolhouse with its rows of standard classrooms . . . an environment which encourages greater interaction between teacher and pupil, and between teacher and teacher. There are no partitions to fragment learning by dividing teachers, children and subject matter into tight standardized compartments. And there are no halls to funnel children from compartment to compartment at the arbitrary dictate of a bell. Each child finds his own place, creates his own path." (p. 3) Such post-industrial, post-linear prescription is very much the wave of the future.

312. KOHN, Sherwood. The Early Learning Center: Stamford, Conn. N.Y.: Educational Facilities Laboratories (477 Madison Ave.), January 1970. 30 pp. Free.

Pictures, plans, and less than a thousand words are sufficient to powerfully convey the sense of an open learning system for 2-8 year olds that promotes random experiences through a flexible environment or "omnidirectional space."

313. Educational Facilities Laboratories. Educational Change and Architectural Consequences. A Report on Facilities for Individualized Instruction. N.Y.: EFL, 1968. 88 pp. Free.

In view of the new "spirit of innovation, experimentation, venturesomeness" four school designs are suggested (pre-primary, primary, middle, and secondary) "as a stimulus to open up the options in school design," in that "Too many of our schools still stand as

handicaps to new programs and new thinking in education." (p. 85)

314. CASTALDI, Basil. Creative Planning of Educational Facilities. Chicago: Rand McNally, 1969. 364 pp.

Although largely a textbook with the conventional array of platitudes, the concluding portions (pp. 333-352) provide a quick overview of architectural trends in the future design of educational facilities and instructional concepts underlying future facilities. The master trend is away from the conventional box toward forms facilitating maximum flexibility.

315. Council of Educational Facility Planners. Educational Facilities in Urban Settings. Columbus, Ohio (29 W. Woodruff Ave.): CEFP, 1968. 64 pp.

Presentations at 1967 CEFP Annual Conference, with proposals such as educational parks, urban planning, and demographic studies of need.

316. Rice Design Fete IV (School of Architecture, Rice University). New Schools for New Towns. Sponsored by Educational Facilities Laboratories, 1968 (?). 60 pp.

A collection of very far-out ideas of possible designs aimed at "a new kind of intermix between education and community." Based on a naive view of a linked-in society of willing learners who eagerly consume knowledge at the end of a dispensing pipeline. Thus, "commuting time should become, whenever possible, learning time" and various auto links are proposed. Continuing with autos, educational service stations and "drive-in study units" are suggested. Then there are mobile study carrels equipped for individual study, data retrieval, thought, and rest. Abolishing the classroom, a Town Brain is offered "to transmit learning" to town residents of all ages. "The schoolhouse will disappear--or linger as a memorial to pre-electronic learning." No comments on whether this is wanted or desirable . . . but, of course, demand can always be created.

317. National Commission on Technology, Automation, and Economic Progress. Educational Implications of Technological Change. Appendix Volume IV to Technology and the American Economy. Washington: USGPO, February 1966.

Especially see James D. Finn, "The Emerging Technology of Education" (pp. 33-52), an overview of trends in the 1955-65 period, and a forecast for the period 5-10 years ahead concerning innovation, the new "educational establishment," systemization of materials, developments in hardware, information storage and retrieval, standardization, the the National Assessment program, administration, R&D, educational

psychology, and the new "educational industry." Additional reports under the heading of "Education in the United States: Status and Prospect" (pp. 67-150) provide recommendations on adult education, education for employment, civic education, compensatory education, and the role of the federal government in the years ahead. RECOMMENDED

318. U.S. Congress. House of Representatives, Committee on Education and Labor. To Improve Learning: A Report to the President and the Congress of the United States by the Commission on Instructional Technology. Washington: USGPO, March 1970. 124 pp. $.50.

Concludes that technology could bring about far more productive use of the teachers' and the students' time, but "that one-shot injections of a single technological medium are ineffective. At best they offer only optional 'enrichment.' Technology, we believe, can carry out its full potential for education only insofar as educators embrace instructional technology as a system and integrate a range of human and nonhuman resources into the total educational process." (p. 7)

The report recommends establishing the National Institute of Education within the Department of Health, Education and Welfare, and a National Institute of Instructional Technology within the NIE. The NIIT would establish a resource center, conduct demonstration projects, train and retrain teachers and specialists, and bring education and industry together.

The Commission, chaired by Sterling M. McMurrin and staffed by members of the Academy for Educational Development, will publish its full report in two volumes through the R. R. Bowker Co. Appendix G of this summary report lists about 140 papers prepared at the request of the Commission and about 80 papers sent to the Commission for information. Presumably, these will be drawn together in the full report.

319. MORPHET, Edgar L. and David L. JESSER (eds.). Planning for Effective Utilization of Technology in Education. Denver: Designing Education for the Future--An Eight State Project, August 1968. 372 pp.

32 reports prepared for a national conference. Many of the statements are from representatives of potential supplying organizations. Volume 6 in a continuing series.

320. FUCHS, Walter R. The New Learning: Technology in the Service of Education. N.Y.: Herder and Herder, 1970. $8.50.

"Describes the new technical innovations which will influence education in the future, and illustrates how these present-day developments embody the philosophies of great teachers in the past. This book provides a clearly written interpretation of the current revolution in education for both the layman and the expert." (advt.) Insofar as the "revolution," see the following item.

321. OETTINGER, Anthony, with the collaboration of Sema MARKS. Run, Computer, Run: The Mythology of Educational Innovation. Harvard Studies in Technology and Society. Cambridge: Harvard University Press, 1969. 302 pp. $5.95.

An authoritative, caustic, myth-crumbling essay concluding that "The formal education system is bound to society in a way that is almost ideally designed to thwart change. Little substantive technological change is therefore to be expected in the next decade." (p. 215) The "present innovation fad . . . favors highly visible quickie approaches creating the illusion of progress." (p. 220) RECOMMENDED

322. OETTINGER, Anthony and Sema MARKS, "Educational Technology: New Myths and Old Realities" and a "Reply" to Six Critics, Harvard Educational Review, 38:4, Fall 1968.

323. Aerospace Education Foundation. Technology and Innovation in Education: Putting Educational Technology to Work in America's Schools. N.Y.: Praeger, 1969. 149 pp.

The Foundation, an affiliate of the Air Force Association, "adapted as a priority goal the exploration of the potential of the new educational technology--much of it developed by the Air Force through the use of the systems approach--for the enhancement of America's civilian schools." (p. ix) Based on a seminar entitled "Education for the 1970's," the book is divided into three sections: behavioral technology (motivation), the computer as an educational tool, and the forces shaping education.

324. MARGOLIN, Joseph B. and Marion R. MISCH (eds.). Computers in the Classroom: An Interdisciplinary View of Trends and Alternatives. N.Y.: Spartan Books, 1970. 382 pp. $14.00.

The result of a traveling seminar of 12 senior scientists and educators, the back cover advertises "the first published book to present the issues and alternatives that will confront education as computers make their way into the nation's schools." The summary chapters by the editors (pp. 285-389) provide some non-startling "predictions" (such as the computer accelerating educational research and aiding management and counseling) and a wide array of cautious prescriptions to enhance technological adaptation. The volume appears to be comprehensive, but uncritical in its advocacy.

325. BUSHNELL, Don D. and Dwight W. ALLEN (eds.). The Computer in American Education. N.Y.: Wiley, 1967. 300 pp.

Proceedings of a conference sponsored by the Association for Educational Data Systems.

326. CAFFREY, John G. The Impact of the Computer on School Systems. Santa Monica: Systems Development Corp., SP-1803, September 23, 1964. 9 pp.

327. LOUGHARY, John. Man-Machine Systems in Education. N.Y.: Harper & Row, 1966. 242 pp.

328. KAY, Harry, Bernard DODD, and Max SIME. Teaching Machines and Programmed Instruction. Baltimore: Penguin, 1968. 173 pp.

Final chapter discusses "Social Implications of an Effective Technology."

329. WATSON, Goodwin (ed.). No Room at the Bottom: Automation and the Reluctant Learner. Washington: National Education Association (Project on the Educational Implications of Automation), 1963. 102 pp.

Based on proceedings of a 1962 symposium.

330. BRICKMAN, William W. and Stanley LEHRER (eds.). Automation, Education, and Human Values. N.Y.: School and Society Books, 1966. 419 pp. Bib. 373-390.

33 papers largely developed in connection with a major project of the Penn State Center for Continuing Liberal Education that is concerned with the impact of technological change on the individual. Bibliography of about 200 items grouped by social trends, technological change, cybernetics and computers, work and leisure, etc.

331. EVANS, Luther H. and George E. ARNSTEIN (eds.). Automation and The Challenge to Education. Washington: National Education Association (Project on the Educational Implications of Automation), January 1962. 190 pp.

15 articles derived from a symposium.

332. CARTER, Launor and Harry SILBERMAN. The Systems Approach, Technology and the School. Santa Monica: Systems Development Corporation, SP-2025, April 1, 1965. 30 pp.

Discusses various computer applications as a means of approaching a model of "The 'Ideal' School."

333. SILBERMAN, Harry F. Trends in Educational Technology. Santa Monica: Systems Development Corporation, SP-2291, December 13, 1965. 10 pp.

Rather than trends, the paper provides a concise summary of "extrapolations made from current trends in research on instruction to predict the course of future improvements in public education." Mentions more rational sequencing of educational activities, more desired outcomes in student behavior, more time devoted to public education ("many public schools will have become residential boarding schools"), individualized progress rates, increased engineering of human behavior in the direction of national objectives, etc.

334. COULSON, John E. An Instructional Management System for the Public Schools. Santa Monica: Systems Development Corporation, TM-3298/002/00, June 12, 1967. 16 pp.

Forecasts the computer applications in a typical urban school district of 1980 or 1985, and discusses the interim Instructional Management System of SDC that will help the school to approach this form.

335. Educational Screen and Audiovisual Guide ("Education in 1990 Issue"), 45:9, September 1966.

Several brief, optimistic, and childish articles, a scenario originally written for the Boy Scouts, and a few words from Margaret Mead on "The Information Explosion."

F. Personnel

336. U.S. Office of Education. The Education Professions: 1968. A Report on the People Who Serve Our Schools and Colleges. Washington: USGPO, OE-58032, June 1969. 377 pp. $2.75.

A first annual assessment of the state of the education professions, as required by the Education Professions Development Act of 1967. A thorough analysis of trends and future requirements through 1975 at all levels, including preschool, elementary, and secondary programs; vocational, post-secondary vocational, and adult education programs; and undergraduate and graduate education, with analysis of personnel in both public and private institutions, and teacher training at each level. Despite "the lack of adequate and comprehensive data on educational personnel . . . the report will hopefully prove to be a positive step toward building a sophisticated bank of information which can be useful to all levels of education." (p. iii) RECOMMENDED

337. CONANT, James Bryant. The Education of American Teachers. N.Y.: McGraw-Hill, 1964. 319 pp.

Guided by the values of freedom and responsibility, this thorough study makes 27 recommendations, grouped in the final chapter under five headings.

338. KOERNER, James D. The Miseducation of American Teachers. Boston: Houghton Mifflin, 1965; Baltimore: Penguin Books, n.d. 360 pp. $1.25.

Based on an extensive study, this scathing critique finds "A weak faculty operates a weak program that attracts weak students." (p. 242) Concludes with 13 recommendations to preserve and strengthen the basic structure of professional education, including: shutting down teacher's colleges or converting them to general institutions, utilizing the regular four-year undergraduate program as the standard preparation

for teachers, raising grade point averages for admission to teacher education programs, a drastic reduction in the number of education specialties and sub-specialties, etc.

339. STONE, James C. Breakthrough in Teacher Education. San Francisco: Jossey-Bass, 1968. 206 pp. $7.50.

Discusses the Breakthrough Programs (largely sponsored by the Ford Foundation): "a scattering of models from which new patterns in teacher education might spread. Most of the nation's colleges continue to prepare the majority of future teachers in conventional programs." (p. 155) Especially see chart of trends in teacher preparation (pp. 175-176) and new models for innovation proposed in the last chapter. RECOMMENDED

340. SMITH, B. Othanel. Teachers for the Real World. Washington: American Association of Colleges for Teacher Education, 1969. 185 pp.

Based on research by a task force of the NDEA National Institute for Advanced Study in Teaching Disadvantaged Youth. Radical reforms are advocated, including "training complexes," division of the teaching profession into sub-roles, combining theoretical training with actual classroom problems, etc.

341. EDELFELT, Roy A. Redesigning the Education Profession. Washington: NEA, January 1969. 17 pp. Mimeo.

A recent policy statement by the Executive Secretary of the National Commission on Teacher Education and Professional Standards, in which the concept of differentiated staffing is advocated. Such a staff "would include not only teachers but a variety of special service personnel, subject matter specialists, administrators, student teachers, interns, people from other professions, craftsmen, and paraprofessionals." (p. 8)

342. LINDSEY, Margaret. New Horizons for the Teaching Profession. A Report of the Task Force on New Horizons in Teacher Education and Professional Standards. Washington: National Education Association, 1961. 243 pp.

The final chapter, "The Teaching Profession in the Decades Ahead" has nothing to do with a wider future, but serves to summarize the recommendations for professional standards.

343. STINNETT, T. M. (ed.). The Teacher Dropout. Itasca, Ill.: Peacock, 1970. 172 pp. $5.75.

Argues "that before we can cope adequately with the pupil dropout problem we must solve the problem of the teacher dropout." (advt.) Arranged by the Commission on Strengthening the Teaching Profession.

344. KING, Edmund J. (ed.). The Teacher and The Needs of Society in Evolution. London: Pergamon International Library, 1970. 332 pp. $6.50.

Twelve essays divided into three sections concerning the background of social and technological change, the changing world of the teacher in schools (including an essay on "The Status, Role and Future of Teachers"), and new perspectives on learning and teaching and on the evolving commitments of students and teachers up to the year 2000 (including an essay "From Teaching to Learning").

345. VAN TIL, William. The Year 2000: Teacher Education. Terre Haute: Indiana: Indiana State University, 1968. 35 pp.

After a good discussion of current general futures thinking (Kahn and Wiener, Commission on the Year 2000), the implications for education and teacher education are explored. Various trends and possibilities are mentioned, but none that are very surprising. The most interesting part of the paper (outlining the various values and resulting methods of "technologists" vs. "social emphasizers") does not build on the rest of the paper.

346. ROSOVE, Perry E. An Analysis of Possible Future Roles of Educators as Derived from a Contextual Map. Santa Monica: System Development Corporation, SP-3088, March 8, 1968. 82 pp.

A subsequent report to item 686 that presents the "complete" results of the experiment in the use of contextual mapping. "The mapping process results in the identification of 98 different possible future roles for educators and also, as a by-product, it identifies 101 potential future issues in education." (p. 3) It is concluded that "the projections of current trends in 18 areas as displayed on the contextual map suggests that (the crisis in education) is merely beginning and will become increasingly complex, fractious, and more costly to resolve in the two decades ahead." (p. 30) To prevent an evolutionary form of drift, four new concepts are proposed: the learning environment as a real time facility (blurring the distinction between work and education); the continuous, vertical, learning organization serving all educational levels; the learning environment as a multipurpose facility; and (the major conclusion of the study as derived from the above three concepts) the generic role of the "learning facilitator" (rather than the present generic role of "teacher") as a counselor, engineer, instructor in the use of learning resources, and researcher.

347. FOSHAY, Arthur W. (ed.). The Professional as Educator. N.Y.: Teachers College Press, 1970. 128 pp. $4.95 paper.

348. CLARK, D. L. and J. E. HOPKINS. A Report on Educational Research, Development, and Diffusion Manpower, 1964-1974. Bloomington: Indiana University Research Foundation, 1969.

349. TOPE, D. E. (ed.). A Forward Look: The Preparation of School Administrators, 1970. Eugene, Oregon: University of Oregon Press, 1962.

350. SOUTHWORTH, W. D., "The Superintendency--1980," Clearing House, 43:2, October 1968, pp. 79-81.

A brief prescriptive portrait, predicated on the observation that "the responsibilities of the superintendency have so increased and multiplied that no single person can any longer satisfactorily fulfill the position." (p. 79) Describes the business-oriented senior school administrator, the senior educator, and the new role of school board members similar to that of corporate directors.

G. Finance

351. COONS, John E., William H. CLUNE III, and Stephen D. SUGARMAN. Private Wealth and Public Education. Cambridge: Harvard University, Belknap Press, 1970. 520 pp. $12.50.

Three lawyers analyze discrimination by wealth in state systems of school finance and American value systems in general, proposing a plan of "power equalizing" based on manipulation of state and local taxes. The primary hope for change is through court actions.

352. COONS, John and Stephen B. SUGARMAN. The Family Choice in Education Act: A Heuristic Model for State Education. Berkeley: Institute for Governmental Studies, Spring 1971. Approx. $1.50. (Also to appear in California Law Review, May 1971.)

353. Center for the Study of Public Policy. Education Vouchers: A Preliminary Report on Financing Education by Payments to Parents. Cambridge, Mass.: The Center (56 Boylston St.), March 1970. 219 pp.

A report of the first phase of research contracted by USOE which explores the following areas: determining the value of vouchers and the restrictions (if any) on private supplementation, insuring adequate information for intelligent choices by parents, procedures for allocating scarce places, education vouchers compared with state "purchase of services" from private schools, and the relationship of vouchers to racial segregation and the First Amendment prohibition against establishment of religion. The second phase of this important research will demonstrate the feasibility of an experimental project.

354. BANE, Mary Jo, "On Tuition Voucher Proposals," Harvard Educational Review, 41:1, February 1971, pp. 79-87.

An essay review of Education Vouchers (item no.353), Private Wealth and Public Education (item no.351), and An Essay on Alternatives in Education (item no.836).

355. BERKE, Joel S., Stephen K. BAILEY, Alan K. CAMPBELL, and Seymour SACKS. Federal Aid to Public Education: Who Benefits? Syracuse: The Policy Institute of the Syracuse University Research Corporation, January 31, 1971. 84 pp.

The first report of a Ford Foundation project to determine the patterns of aid allocation, the decision-making processes determining these patterns, and necessary changes.

It was found that "Rural areas receive far more aid proportionately than metropolitan areas, even more than central cities. Many individual aid programs give more help to rich districts than they do to poorer ones. Fund flows over time are so uneven, both within fiscal years and from year to year, that harried school planners often end up shunting federal aid funds to the least pressing, least important of their academic priorities. And problems of program administration further dilute the effect of federal dollars." (p. 52)

Some tendencies toward equity were discovered, but considered as "far too little to overcome the basic maldistribution of educational finances in this nation . . . Until the federal government assumes the responsibility for providing an adequate and equitable pattern of aid to education, the crisis in American education will continue." (p. 53)

356. MORPHET, Edgar L. and David L. JESSER (eds.). Emerging Designs for Education. Denver: Designing Education for the Future: An Eight State Project, May 1968. 240 pp.

Articles on implications of societal changes for the educational program, alternative local school district models, and alternative models for state financing. Vol. 5 of a series. RECOMMENDED

357. National Education Association, Committee on Educational Finance. Interdependence in School Finance: The City, The State, The Nation. Proceedings of the Eleventh National Conference on School Finance. Washington: NEA, 1968.

358. New York State Commission on the Quality, Cost and Financing of Elementary and Secondary Education. Final Report, November 1971.

The Fleischmann Commission, backed by $900,000 in state funds, will attempt to produce a "politically feasible" report on every facet of the New York education system, to provide information for legislative action in the 1972 session. (For further information, write to The Commission, 800 Second Avenue, New York, N.Y. 10017)

359. WINDHAM, Douglas M. Education, Equality, and Income Redistribution. Lexington, Mass.: D. C. Heath, 1970. 120 pp. $10.00.

"A startling appraisal of public education's built-in inequities due to regressive taxation." (advt.)

360. KEYSERLING, Leon H. Achieving Nationwide Educational Excellence: A Ten-Year Plan, 1967-1977, to Save the Schools. Conference on Economic Progress. Washington: December 1968.

361. FREEMAN, Roger A. Financing the Public Schools. Vol. 1. School Needs in the Decade Ahead. Washington: Institute for Social Science Research, 1958. 273 pp.

A thoughtful consideration of public school enrollments and expenditures for teachers and buildings in 1970, as viewed from 1958, and aided by 87 tables and 24 charts. The fear that expenditures for public elementary and secondary education would exceed $30 billion in 1970 proved correct, if not an understatement: the public schools cost $36 billion in 1969-70 (current dollars). Freeman asks whether enough is being spent, and how much should be spent, and suggests that standards could be raised at no extra costs by cutting "frills."

362. FREEMAN, Roger A. Financing the Public Schools. Vol. II. Taxes for the Schools. Washington: Institute for Social Science Research, 1960. 441 pp.

An extensive and scholarly discussion of various taxation alternatives, with the conclusion that "The fiscal case for federal school aid is contrived, unsubstantiated, and fallacious. The ideological case . . . cannot be proven or rebutted." (p. xxxvii)

363. ERICKSON, Donald A., "Central Constitutional Questions on Aid to Non-public Schools," State Government, 43:4, Autumn 1970, pp. 242-252.

H. Miscellaneous

364. CERVANTES, Lucius F. The Dropouts: Causes and Cures. Ann Arbor: University of Michigan Press, 1965. 244 pp.

A thorough survey of why youth drops out of high school, looking at family, school experience, dropout youth culture, and personality. A multitude of solutions are proposed (pp. 199-218), with suggested actions for community, government, business, labor, schools, and the family.

365. EFFRAT, Andrew, Roy E. FELDMAN, and Harvey M. SAPOLSKY, "Inducing Poor Children to Learn," The Public Interest, No. 15, Spring 1969, pp. 106-112.

In view of the characteristics of lower class subcultures, the authors propose a payment schedule to provide the student with incentives to improve his classroom performance. This proposal is quite amenable to a pilot study.

366. BRIM, Orville G., Jr., et. al. American Beliefs and Attitudes About Intelligence. N.Y.: Russell Sage Foundation, 1969. 291 pp.

A report of a survey of some 10,000 secondary school students in the 1963-64 period, finding widespread ignorance about intelligence and testing (without questioning these measures).

"It seems to the authors that a humanistic conception of man would hold that each member of society has the right to valid information as to his or her intellectual abilities, to provide a basis for a rational estimate of one's competence, and thus the establishment of reasonable aspirations in those sectors of life where intelligence counts heavily.

"Both the general ignorance and the inequities in knowledge about one's own intelligence seem to come primarily from school policies that keep test score information confidential, and in the possession of the school system, rather than communicating such results to the student or his family." (p. 12)

"If a school were to develop a systematic policy of dissemination of test scores, it could replace the irrational, unevaluated, and probably damaging procedures of the schools at the present time in handling differences in intelligence. It would, however, demand that educators face up squarely to the inequities in the educational system that contribute, at least somewhat, to the test performances . . ." (p. 13)

367. 1985 Committee of the National Conference of Professors of Educational Administration. Educational Futurism, 1985: Challenges for Schools and Their Administrators. Berkeley: McCutchan Publishing Corp., June 1971. Approx. 220 pp.

Contents to include "On Confronting the Future" by Walter G. Hack (Chairman), "Futurism: Its Development, Content, and Methodology" by Richard C. Lonsdale, "Perspectives on the Educational Program, 1985" by Stephen J. Knezevich, "Governance of Public Education in 1985" by Walter G. Hack, "Organization for Education in 1985" by Conrad Briner and Gerald Sroufe, "The School Administrator in 1985" by Robert E. Ohm, "Futurist Planning: An Example and Procedures" by Richard C. Lonsdale and Robert E. Ohm, and, as an appendix, "Essential Reading for the Future of Education: A Selected and Critically Annotated Bibliography" by Michael Marien (item 805).

368. CRONBACH, Lee J. and Patrick SUPPES (eds.). Research for Tomorrow's Schools: Disciplined Inquiry for Education. Report on the Committee on Educational Research of the National Academy of Education. N.Y.: Macmillan, 1969. 281 pp.

Although "designed to help the educational community make more effective use of research and scholarship in reshaping and revitalizing educational institutions" this austere volume is far removed from the

(cont'd)

empassioned proposals listed elsewhere in this bibliography. It is fundamentally important to consider whether the "disciplined inquiry" as proposed here can revitalize education or whether it, ironically, is part of the problem.

369. U.S. Department of Health, Education, and Welfare. Educational Research and Development in the United States. Washington: USGPO, 1970. 200 pp. $2.00.

"Explores the development, the present status, and possible lines of future growth of educational research and development." (advt.)

III. Higher Education

A. General

370. Carnegie Commission on Higher Education.
--General Information pamphlet available from The Commission, 1947 Center St., Berkeley, Calif. 94704
--All publications may be ordered from McGraw-Hill Book Co., Hightstown, N.J. 08520

A monumental endeavor, established in Spring 1967 and headed by Clark Kerr, concerned with the functions, structure, and governance of higher education, innovation and change, demand and expenditures, and effective use of resources. Special Reports "of urgent public interest" have appeared since December 1968. (See the four following items plus items No. 436, 501, 503, 540, and 921.) Topics currently under consideration for future reports involve relationships between the campus and the city, and new educational technology. A recent forecast estimates 20 of these reports before the final report of the Commission is available in June 1972. In addition to the reports, 67 special studies have been commissioned, many of them serving as background material for the reports. The studies published so far (that are considered relevant to this bibliography) may be found by consulting the Index by Organization.

371. Carnegie Commission on Higher Education. Quality and Equality: (Revised Recommendations) New Levels of Federal Responsibility for Higher Education. N.Y.: McGraw-Hill, June 1970. 48 pp. $1.95. (Earlier edition published in December 1968)

The first in a series of special reports, urging more federal aid to meet two "urgent" national priorities: greater equality of opportunity and a substantial expansion of health service personnel. Other recommendations concern student aid, construction, research, etc., and the specific advocacy of a National Foundation for the Development of Higher Education and a Council of Advisors on Higher Education (modeled after the Council of Economic Advisors).

372. Carnegie Commission on Higher Education. A Chance to Learn: An Action Agenda for Equal Opportunity in Higher Education. A Special Report of the Commission. N.Y.: McGraw-Hill, March 1970. 40 pp. $1.95.

By 1976, it is proposed that all economic barriers to educational opportunity be eliminated, that the curriculum and the environment of the college campus not remain a source of educational disadvantage, and that substantial progress be made toward improvement of educational quality at levels prior to higher education and toward provision of universal access. "By the year 2000, there should be no barriers to any individual achieving the occupational level which his talent warrants and which his interest leads him to seek." (p. 28)

373. Carnegie Commission on Higher Education. The Open-Door Colleges: Policies for the Community College. A Special Report of the Commission. N.Y.: McGraw-Hill, June 1970. 88 pp. $1.95.

Recommends establishing 230-280 new community colleges (added to the 1000+ colleges already in existence), so that, by 1980, a community college will be within commuting distance of 95% of all Americans. The Commission favors the "comprehensive" community college with an optimum size of 2000-5000 students.

374. Carnegie Commission on Higher Education. Less Time, More Options: Education Beyond the High School. A Special Report of the Commission. N.Y.: McGraw-Hill, January 1971. 64 pp. $1.95.

This fifth report in a continuing series of interim statements recommends the shortening of undergraduate education from 4 to 3 years, greatly expanded opportunities for post-secondary education throughout life, and drastically reducing the number of degrees offered from the current 1600 to about 160 broad area degrees that "decrease the now increasing emphasis on narrow certification." (For elaboration, see Spurr, item No. 587) Such reforms would reduce the forecasted enrollment growth by 1980 from 3 million to 2 million, and would save higher education a total of $5 billion in capital construction costs during the 1970's, as well as $3-5 billion a year in operating expenditures. "We should neither over-invest the time of students nor the resources of society in higher education." RECOMMENDED

375. American Academy of Arts and Sciences, Assembly on University Goals and Governance. A First Report of the Assembly on University Goals and Governance. Boston: AAAS (280 Newton Street), 1971. Free. Reprinted in The Chronicle of Higher Education, V:15, January 18, 1971.

A blue ribbon panel headed by Martin Meyerson, listing 85 theses to stimulate academic reforms in all areas of higher education, and nine themes pervading the report: learning as the central mission, institutional self-knowledge as a basis for educational reform, extending choice in admissions and attendance, experimentation and flexibility

(cont'd)

in undergraduate and graduate education, diversification and differentiation, preserving the private and public systems, enhancing the professoriate by broadening the basis of recruitment, governance by delegation and accountability, and inventing new procedures and institutional forms to make co-operation and self-help more of a reality. RECOMMENDED

376. President's Task Force on Higher Education. Priorities in Higher Education. Washington: USGPO, 1970. $.30. (Recommendations published in The Chronicle of Higher Education, October 19, 1970, pp. 3-4)

Chaired by James M. Hester, the Task Force makes recommendations on financial aid for disadvantaged students, Negro colleges, support for health-care professional education, increased tax incentives for support to higher education, the expansion of opportunities for post-high school education, the support of high-quality graduate and professional education, clarification of institutional purposes, improvement in the quality of the curriculum and methods of teaching and learning, clarification of institutional governance, and establishing a National Academy of Higher Education modeled after the National Academy of Sciences. RECOMMENDED

377. NEWMAN, Frank (Task Force Chairman). Report on Higher Education. Washington: U.S. Department of Health, Education, and Welfare, March 1971. 140 pp. (Major proposals reprinted in The Chronicle of Higher Education, March 15, 1971, pp. 4-8.)

A study group, funded by the Ford Foundation and initiated and endorsed by top officials in the Nixon Administration, challenges the assumptions on which traditional higher education is based. It urges wholly new institutions, equivalency examinations for knowledge acquired outside of classrooms, greater use of educational television for those who do not wish to attend classes, the development of informal tutors from whom persons could obtain academic assistance, and more recruiting of older students to overcome the college's role as a principal cause of the generation gap. The college as an isolated community is criticized for bearing little resemblance to the real world, and it is doubted whether education could be made more relevant to the real world by simply developing new curricula. RECOMMENDED

378. The President's Committee on Education Beyond the High School. Second Report to the President. Washington: USGPO, July 1957. 114 pp.

Originally intended as an interim report similar to the first one (November 1956), funds were cut off and this report serves as a final statement. There are a number of recommendations concerning inputs: the need for teachers, assistance to students, expansion and diversity of educational opportunities, and financing higher education; but there is no concern for the quality of educational services as there is at at present. However, there are two remarkable insights that are still relevant for contemporary policy-making: the recognition of peripheral

education in corporations, the military, etc., such that "we have become a 'society of students'" (p. 1), and the emphasis on the neglected federal role in collecting information. "We have been struck above all else by the astounding lack of accurate, consistent, and up-to-date facts, and by how little this Nation knows about its enormously vital and expensive educational enterprise in contrast to how much it knows, in great detail, about agriculture, industry, labor, banking and other areas." (p. 15) Indeed! RECOMMENDED

379. Select Committee on the Future of Private and Independent Higher Education in New York State. New York State and Private Higher Education. Report of the Committee. Albany: State Education Department, Bureau of Publications, January 1968. 155 pp.

Chaired by McGeorge Bundy, the Committee was formed in the face of "an immediate financial crisis of disastrous proportions." The 16 recommendations fall in four general classes: direct assistance from New York State to private colleges and universities, the amendment of the State Constitution to facilitate this assistance, a reconfirmation of the existing responsibilities and powers of the Board of Regents (reinforced by strengthening the staff of the State Department of Education), and steps for both private institutions and the Board of Regents "to develop a much stronger base of information and reporting upon which statewide educational decisions can be based."

380. Commission on Post-Secondary Education in Ontario. Post-Secondary Education in Ontario: A Statement of Issues. Toronto: Ontario Department of Education (44 Eglinton Avenue West), 1970. 20 pp. Free.

An interim statement by the Wright Commission, briefly outlining issues such as expected number of students, institutional characteristics, costs, the economic argument for education, the manpower argument for education, certification, education and social justice, the example of the U.S., measurements, technology, structural problems, students' share of cost, etc. An excellent overview of essential questions. RECOMMENDED

381. College Entrance Examination Board. Planning College Policy for the Critical Decade Ahead. N.Y.: CEEB, College Admissions 5, 1958. 123 pp.

"Considers how colleges should modify their admissions, fiscal, instructional, and other policies to prepare for the increased number of applicants that has been forecast." (CEEB catalog)

382. EURICH, Alvin C. and the Staff of the Academy for Educational Development. Campus 1980: The Shape of the Future in American Higher Education. N.Y.: Delacorte, 1968. 327 pp.

A competent anthology of largely descriptive forecasts by the top writers on higher education, who adhere quite well to the objective

(cont'd)

of looking at "Campus 1980." Topics include the magnitude of higher education, higher education and the national interest, cities and universities, universities and the world, professionalism, teaching, community colleges, continuing education, college students, curriculum, instructional organization, instructional technology, graduate education, campus architecture, and the university and change. RECOMMENDED

383. MAYHEW, Lewis B. (ed.). Higher Education in the Revolutionary Decades. Berkeley: McCutchan, 1967. 466 pp.

A reader presenting an excellent selection of 34 articles, some of which are cited elsewhere in this bibliography. Although many of the articles deal with trends in the revolutionary decades since World War II, the inclusion of several future-oriented articles implies that forthcoming decades will also be revolutionary. Especially see the scenario by Alvin C. Eurich, "A Twenty-First Century Look at Higher Education" (pp. 443-453), in which universities are seen as stressing wisdom rather than fact-mongering, using television lectures by the world's leading scholars, judging students by standardized criteria of achievement rather than time spent in college, employing microfilmed libraries and portable television sets in dormitory rooms, and allowing individual determination of course mixes. (Eurich offers a similar but updated scenario in Reforming American Education, Item No. 138.)

384. MARGOLIS, John D. (ed.). The Campus in the Modern World: Twenty-Five Essays. N.Y.: Macmillan, 1969. 381 pp.

A worthwhile anthology of reprints and original essays "exploring the fundamental questions of higher education in general" with little concern for contemporary issues except in passing. Part V has six original essays on alternatives by Jacques Maritain, Clark Kerr, Paul Goodman, John Gardner, John Keats, and Michael O'Neil.

385. CAFFREY, John (ed.). The Future Academic Community: Continuity and Change. Washington: American Council on Education, 1969. 327 pp. $7.00.

Proceedings of the 1968 ACE Annual Meeting, including articles by Bertrand de Jouvenel, Alvin C. Eurich, Constantinos Doxiadis, John Gardner, etc.

386. HENDERSON, Algo D. (ed.). Higher Education in Tomorrow's World. Ann Arbor: University of Michigan, 1968. 189 pp. $3.50.

Proceedings of an international conference held in April 1967, with 23 papers (8 by U.S. authors) considering the university and tomorrow's student, tomorrow's people, tomorrow's nation, and tomorrow's civilization. Most of the papers are prescriptive.

387. STROUP, Thomas B. (ed.). The University in the American Future. Lexington: University of Kentucky Press, 1966. 111 pp. $4.00.

Proceedings of the 1965 University of Kentucky centennial conference, with essays by Kenneth D. Benne, Sir Charles Morris, Henry Steele Commager, and Gunnar Myrdal on the theme of "A University, A.D. 2000."

388. MIESCHER, Peter A., Carlo HENZE, and Raeto SCHETT (eds.). The Modern University. Structure, Functions, and Its Role in the New Industrial State. A Symposium, Geneva, October 1968. N.Y.: Intercontinental Medical Books, 1969. 194 pp. Paper, $8.20.

389. LAWRENCE, Ben, George WEATHERSBY, and Virginia W. PATTERSON (eds.). Outputs of Higher Education: Their Identification, Measurement, and Evaluation. Papers from a seminar held at Washington, D.C., May 3-5, 1970, conducted by the Western Interstate Commission for Higher Education in cooperation with the American Council on Education and the Center for Research and Development in Higher Education at Berkeley. Boulder, Colo.: WICHE, July 1970. 130 pp. $3.50.

Ten important essays examining purposes, priorities, responsibilities and capabilities of higher education, under the rationale that "Educational decision-makers are seeking honest, viable responses to the issues of public accountability, flagging financial support, and an earlier over-reaction to short-term need. They are seeking forthright approaches to the polarization of opinion about the role of the university in a free society ordered by law." (p. 7) Bibliography of about 200 items in three categories: output variables and models for their analysis; goals and/or psycho-social effects of education on its constituencies; and educational costs. RECOMMENDED

390. MINTER, W. John and Ian M. THOMPSON (eds.). Colleges and Universities as Agents of Social Change. Berkeley: Center for Research and Development in Higher Education, November 1968. 148 pp. $3.50.

Six articles and a symposium discussion, based on the 10th College Self-Study Institute, held in 1968. Annotated bibliography of about 100 items on higher education and social change.

391. SMITH, G. Kerry (ed.). Stress and Campus Response: Current Issues in Higher Education - 1968. A Publication of the American Association for Higher Education. San Francisco: Jossey-Bass, 1968. 297 pp.

25 essays in 5 categories: a society in crisis, students, organization and governance, curricular relevance, and looking toward the future.

392. KEAN, Richard (ed.). Dialogue on Education. Indianapolis: Bobbs-Merrill, 1967. 144 pp.

(cont'd)

An outgrowth of the National Conference on Curricular and Instructional Innovation in Large Colleges and Universities, which was "wrecked on the rocks of non-communication." Contains eight future-oriented articles by students and faculty.

393. BREWSTER, Kingman, Don K. PRICE, Robert C. WOOD, and Charles FRANKEL. Educating for the Twenty-First Century. Urbana: University of Illinois Press, 1969. 65 pp. $.95.

Four lectures given during the Final Week Celebration of the University of Illinois Centennial Year, March 1968: "The Future of Formal Education," "Science and Technology in a Democratic Society--Educating for the Scientific Age," "The Competent City," and "The Future University: Tool or Maker of Foreign Policy," by Brewster, Price, Wood and Frankel respectively. Although the lectures are competent and provocative, none of the authors attempt to discuss "the twenty-first century" to any degree whatsoever--still another example of convocational rhetoric.

394. MORISON, Robert S. (ed.). The Contemporary University: U.S.A. Boston: Houghton-Mifflin, 1966. 364 pp.

Revised Fall 1964 issue of Daedalus.

395. POTTER, P. and R. LEEDS (eds.). Aims of Education. Washington: National Student Association, 1962. 73 pp.

A selection of general readings, some of which include "Alternatives for American Education." This may well be one of the earliest publications entertaining the notion of "alternatives."

396. HODGETTS, John Edwin (ed.). Higher Education in a Changing Canada. Toronto: University of Toronto Press, 1966. 90 pp.

A nine-paper symposium presented to the Royal Society of Canada in 1965. Especially see the first chapter on trends and prospects in higher education.

397. HARRIS, Robin S. (ed.). Changing Patterns of Higher Education in Canada. Toronto: University of Toronto Press, 1966. 106 pp. $3.50.

Four articles focused on change in various geographic regions.

398. KERR, Clark. The Uses of the University. Cambridge: Harvard University Press, The Godkin Lectures, 1963. 140 pp.

Although primarily known for introducing the concept of the "multiversity," there is also a provocative chapter entitled "The Future of the City of Intellect." Planners might well contemplate the statement (p. 102) that "Change comes more through spawning the new than reforming the old."

399. GREEN, Thomas F., "Post-Secondary Education: 1970-1990" in Dilemmas in American Policy: Crucial Issues of Contemporary Society. Syracuse: Syracuse University Publications in Continuing Education, No. 62, November 1969, pp. 59-84. (Free reprints available from Educational Policy Research Center at Syracuse)

A discussion of the post-secondary system including the entire range of on-the-job training, adult education, museums, art centers, and technical institutes as well as colleges and universities. In contrast to today's closed system of rigorous credentialism, "extended professionalism," and specialization, a scenario is offered (centered around a university president in 1988) of a new system unbound by sterile qualifications for students or staff, and unrestricted in its offerings by status or place. RECOMMENDED

400. WOLFF, Robert Paul. The Ideal of the University. Boston: Beacon Press, 1969. 161 pp. $5.95.

A well-written essay responding to the events at Columbia and attempting to develop a program of practical reform of present-day institutions, based on the view that "the competition for scarce places at top colleges corrupts the secondary school education, and even corrodes primary education as well." After a discussion of four models (the university as A Sanctuary of Scholarship, A Training Camp for the Professions, A Social Service Station, and An Assembly Line for Establishment Man), the final chapter proposes that "performance in high school must be made irrelevant to college admission and college performance must be made irrelevant to graduate and professional admission." (p. 142) Degrees would be abolished, including the Ph.D. and its questionable "contribution-to-knowledge" requirement, in turn freeing students for truly meaningful work. Professional training would be an alternative to undergraduate education, rather than a linear sequel to it, and undergraduate admissions would be by lot among those attaining some minimum performance.

401. SANFORD, Nevitt. Where Colleges Fail: A Study of the Student as a Person. San Francisco: Jossey-Bass, 1967. 229 pp.

The editor of the classic The American College aims "to help restore the student to his rightful place at the center of the college's activities," stating the case for individual development as the primary aim of education, and presenting a theory of how students actually develop. Advocates a "total educational environment" to be guided by a theory of personality. RECOMMENDED

402. AXELROD, Joseph, et. al. Search for Relevance: The Campus in Crisis. San Francisco: Jossey-Bass, 1969. 244 pp. Bib., pp. 212-237.

Tying together Nevitt Sanford's theory of student development, old ideals, and present student protest, four "total design" models are proposed: a cluster college on the campus of an urban college or

(cont'd)

university, a B.A. program in Future Studies, a community college, and an Experimental Freshman Year Program. Bibliography of about 400 items. RECOMMENDED

403. HENDERSON, Algo D. The Innovative Spirit. San Francisco: Jossey-Bass, 1970. $8.75.

Outlines proposals for reform on issues such as curriculum change, student-faculty-administration relationships, governance, restructuring of professional schools, faculty loyalty, and new forms for colleges.

404. KATZ, Joseph, and Associates. No Time For Youth. San Francisco: Jossey-Bass, 1970. 463 pp.

A sympathetic investigation of the undergraduate student, based on interviews with 3500 freshmen and 200 follow-up interviews during the next four years of college life. Concludes with a recommendation for education oriented to individual development.

405. The Committee on the Student in Higher Education. The Student in Higher Education. New Haven, Conn.: The Hazen Foundation, January 1968. 66 pp.

"This report was written to bring attention to the possibility of developmental higher education . . . These recommendations call for a major qualitative change in planning for the future of higher education. The Committee has no quarrel with the computer experts, the technical planners, and the budgetary wizards who are telling us how many students, teachers, and classrooms we will need by 1980 . . . but it is not enough, for they are not concerned with the character of education. It takes another kind of planner to consider and envision the quality of human relationships in the college environment." (p. 57) Many recommendations such as the whole freshman year as an orientation to learning, a reduction of competition, a proliferation of experimentation, a reforming of physical structures, etc. Clearly written with a humane concern. RECOMMENDED

406. MINTER, John W. (ed.). The Individual and the System: Personalizing Higher Education. Berkeley: Western Interstate Commission for Higher Education and the Center for Research and Development in Higher Education, 1969. 187 pp. Bib.

Stemming from a 1967 College Self-Study Institute. Includes a 50-page annotated bibliography.

407. BARZUN, Jacques. The American University: How It Runs, Where It Is Going. N.Y.: Harper & Row, 1968; Harper Colophon edition, 1970. 319 pp. $2.45 paper.

Barzun is a well-established commentator on American education, as

indicated in the Appendix D checklist of 144 writings and speeches on educational subjects, 1926-1967 (pp. 295-302). In this rambling but pungent overview, "The New University" that has emerged in the past 20 years is generally viewed with dispair. Subsequent chapters discuss Scholars in Orbit; Students or Victims?; Administrators Above and Below; Friends, Donors, Enemies; Poverty in the Midst of Plenty; and The Higher Bankruptcy--all based on Barzun's extensive experience as academic dean at Columbia. The final chapter, "The Choice Ahead," offers an "incomplete string of (68) imperfect suggestions" based on the premise "that the nation wants a university in the honorific and not in the service-station sense," and that it does not wish a proletarian culture where the prevailing tendency is to suspect height. The suggestions are often difficult to fathom (in contrast to the neat arrays of public commissions), but in general Barzun appears to advocate an enlightened conservative retrenching along the lines of simplification, sobriety, being choosy about new projects, reconsidering research, reducing the fever of mandarinism, a charter of the rights and duties of universities, and cutting down on studies and conferences. To crack the Ph.D., it is suggested that every native-born American be given one at birth; pending this, an interim measure is offered of awarding the Ph.D. immediately after orals. (pp. 261-262) Although an Ombudsman is recommended as an outlet for grievances, "The university is not a political unit and therefore is not a democracy." (p. 266) Given current dispositions, it is doubtful that, in general, the university will be going where Barzun wishes it to go.

408. MARTIN, Warren Bryan. Alternative to Irrelevance: A Strategy for Reform in Higher Education. Nashville: Abingdon Press, 1968. 160 pp.

"The essays in this book are influenced by two assumptions. The first one is that learning in the twenty-first century will take place under arrangements so radically different from present educational forms that the ways we do things now are not likely to have much transfer value then. The second assumption is that the content of educational programs in the future will be changed no less radically than the forms; indeed, changed to such an extent that what we teach today may be regarded by educators in the next century as negative precedents--examples of what not to do." (p. 9) Responding to these assumptions, Martin advocates alternative models within the existing system, and the cluster college concept of small colleges within large universities is considered to be the best mechanism known for testing divergent models.

409. WOODRING, Paul. The Higher Learning in America: A Reassessment. N.Y.: McGraw-Hill, 1968. 236 pp.

A provocative critique by the former education editor of the Saturday Review. See Part IV, "Problems and Proposals," especially Chapter 15 "Problems for Long-Range Planners," and "A Reform Plan for Higher Education" (p. 216). Some useful ideas, in addition to a bleak forecast

of declining enrollments (pp. 169-173), based on the traditional estimate of high school graduates, rather than learning needs of the entire population.

410. ETZIONI, Amitai. Towards Higher Education in an Active Society: Three Policy Guidelines. N.Y.: Center for Policy Research (423 W. 118th St.), 1970. $3.75.

Suggests changes to tie higher education more closely to meaningful national projects and to make the system more effective in leading toward a "person-centered" society.

411. BOWLES, Frank, "American Higher Education in 1990," Minerva, 5:2, Winter 1967, pp. 227-241.

Focuses on the long-range tendency to extend universal education to older age groups and the tendency to bring all forms of post-secondary education under university control. Some of the unsurprising forecasts for 1990: universal pre-school education, urban universities directly involved with urban schools, 30-40% of an age cohort obtaining college degrees, corporations operating accredited institutions of higher education in specialized fields, and a federal department of research and education headed by a cabinet officer. It is questionable, however, whether "education will have lost importance as a major political issue." (p. 241)

412. NISBET, Robert. The Degradation of the Academic Dogma: The University in America, 1945-1970. N.Y.: Basic Books, February 1971. $6.95.

Accuses the universities of having betrayed themselves by abandoning their commitment to the pursuit of knowledge for its own sake, leading to their demise as centers of learning. A program of reforms is offered for regaining a sense of community and a clear definition of the university's distinctive contribution to society.

413. MANN, Richard D. et. al. The College Classroom: Conflict, Change, and Learning. N.Y.: Wiley, 1970. 390 pp. $9.95.

414. TAYLOR, Harold. Students Without Teachers: The Crisis in the University. N.Y.: McGraw-Hill, 1969. 333 pp.

415. TAYLOR, Harold. How to Change Colleges: Notes on Radical Reform. N.Y.: Holt, Rinehart & Winston, March 1971. $4.95; $2.45 paper.

416. STEIN, Maurice and Larry MILLER. Blueprint for Counter Education. N.Y.: Doubleday, 1970. (unpaged)

Three charts and a book in a box.

417. FREEDMAN, Morris. Chaos in Our Colleges. N.Y.: David McKay, 1963. 241 pp.

An astute, sympathetic, and engaging essay by an English professor, based on the premise that "American higher education does not know where it is going, does not even know where it wants to go . . ." (p. 9). Manners and mores of academia are explored, with the concluding chapter "The Future Landscape" providing an interesting and optimistic view of emerging patterns.

418. ACKOFF, Russell L. Toward an Idealized University. Philadelphia: Wharton School of Finance, Management Science Center, July 1968. Fourth version. 25 pp. Mimeo.

A concise, imaginative model of the University as an integrated system.

419. McCONNELL, T. R. A General Pattern for American Public Higher Education. N.Y.: McGraw-Hill, The Carnegie Series in American Education, 1962. 198 pp.

Explores "the pattern of institutions through which a state may provide for the higher education of its heterogeneous student population and for the diverse demands which the American people make on their colleges and universities."

420. PERKINS, James A. The University in Transition. Princeton University Press, 1966. 90 pp.

Three provocative lectures concerning the dynamics of university growth, the search for internal coherence, and the trend from autonomy to systems.

421. JENCKS, Christopher and David RIESMAN. The Academic Revolution. Garden City: Doubleday, 1968. 580 pp. $10.00.

An authoritative overview focusing on the growth of professionalism and the consequent emergence of the "university college" as "the model for the future." Recent dissent and subsequent change, however, may make this thorough volume somewhat obsolete in the next few years. Although largely empirical, the final chapter is devoted to "Reforming the Graduate Schools," a concern that is largely overlooked in the many volumes devoted to undergraduate education. RECOMMENDED

422. HODGKINSON, Harold L. Institutions in Transition. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, August 1970.

A study based primarily on a questionnaire completed in 1968-69 by the presidents of about half of the nation's institutions of higher learning. The major findings indicate a widespread movement for institutions to offer ever more advanced degrees, a greater openness to middle-class minority youths than to lower-class youths of any race, no major differences between institutions in different regions, a growing "homogenization" of higher education, size of institution

(cont'd)

as the chief determinant of differences, and increased faculty and student control over institutional affairs. RECOMMENDED

423. WILSON, Logan (ed.). Emerging Patterns in American Higher Education. Washington: American Council on Education, 1965. 292 pp.

"The 37 papers examine the changing environment of higher education, the institutional modifications that result, the emergence of state systems and voluntary arrangements among institutions, and the more formal interinstitutional and interstate agreements. Readers concerned with planning for the future will find useful guidelines in the critical evaluations of these developments." (ACE Publications Catalog)

424. SMITH, Bardwell L., "Educational Trends and the Seventies," AAUP Bulletin, Summer 1970, pp. 130-136.

Discusses new types of clientele, the decline of separatism, shifts in time and place of the educational enterprise, changing patterns of authority, broadening patterns of support, and new modes of learning.

425. WRENN, C. Gilbert, "Projections of Change and their Impact on College Education," Liberal Education, 54: December 1968, pp. 601-609.

A good essay, commenting on eight societal and value changes and then discussing eight impacts on higher education.

426. KEETON, Morris and Conrad HILBERRY. Struggle and Promise: A Future for Colleges. N.Y.: McGraw-Hill, Carnegie Series in Education, 1969. 444 pp.

Profiles of trends in twelve liberal arts colleges.

427. BRICK, Michael and Earl J. McGRATH. Innovation in Liberal Arts Colleges. N.Y.: Teachers College Press, Published for the Institute of Higher Education, 1969. 173 pp.

An undated survey (presumably 1967 or 1968) of 1209 liberal arts colleges with a 73.0% usable response. Innovations in various curriculum practices, instructional methods, student governance arrangements, and organizational practices are tabulated as existing before 1961, 1961 and after, or planning to introduce. Many individual examples are described. Unfortunately, the data is superficial, with no analysis as to the degree of the innovation (e.g., how many students take how many interdisciplinary courses with what degree of satisfaction), and which classes of institutions (by size, location, and affiliation) are the most innovative. An image of progress and rational adaptation is fostered, only to be shattered by student dissatisfaction with on-campus learning conditions.

428. BASKIN, Samuel (ed.). Higher Education: Some Newer Developments. (Sponsored by The Association for Higher Education, NEA.) N.Y.: McGraw-Hill, 1965. 342 pp.

14 articles on new colleges, curriculum, independent study, study abroad, superior student programs, new media, facilities, the community as a resource, year-round calendars, consortia, and financing.

429. WILLINGHAM, Warren W. Free-Access Higher Education. N.Y.: College Entrance Examination Board, 1970. 252 pp. $6.50.

"Of 2,596 institutions in the fall of 1968, only 789 were found to be sufficiently nonselective and inexpensive to meet the study's definition of 'free-access' colleges. The definition encompassed colleges that accepted all or most high school graduates and charged no more than $400 a year in tuition and fees. Only 42 percent of the country's population lived within reasonable commuting distance of such institutions . . . The study found a 'serious deficiency' of accessible institutions in 23 of the 29 largest metropolitan areas in the country. It showed that there were no free-access colleges in the principal cities of 102 metropolitan areas." (Chronicle of Higher Education, October 19, 1970, p. 5)

430. McGRATH, Earl J. (ed.). Universal Higher Education. N.Y.: McGraw-Hill, 1965. 258 pp. $5.95.

Report of a conference held under the auspices of the Institute of Higher Education at Teacher's College, Columbia, November 1964, presenting predictions on the forms and purposes of U.S. higher education in the next decade.

431. MEDSKER, Leland L. and Dale TILLERY. Breaking the Access Barrier: A Profile of the Two-Year Colleges. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, May 1971. 194 pp. $5.95.

432. ASHBY, Sir Eric. Any Person, Any Study: An Essay on American Higher Education. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, May 1971. 144 pp. $4.95.

433. Center for Policy Research. Post-Secondary Education and the Disadvantaged. N.Y.: Center for Policy Research (423 W. 118th St.), 1970. $3.00.

Advocates three constructive responses: black studies, compensatory education, and open enrollment. Of the three, open enrollment is seen as yielding the greatest long-term benefit to black students and the black community.

B. Governance

434. National Commission on the Causes and Prevention of Violence. To Establish Justice, To Insure Domestic Tranquility. Final Report. Washington: USGPO, December 1969. 338 pp. $1.50.

Especially see Chapter 9 on campus disorder, which recommends a code of conduct for student-faculty-administration relations, contingency plans for dealing with campus disorders, more rapid and effective decision-making, better communications both on the campus and with alumni and the general public, caution against reactive legislation, and a focus on "striving toward the goals of human life that all of us share and that young people admire and respect." (p. 281) Chapter 10, on "Challenging Our Youth," recommends a lowering of the voting age, draft reform, expanded programs of public service and opportunities for inner-city youth, more research on marijuana use, lowered penalties for use and possession of marijuana, and better communication to bridge the generation gap. RECOMMENDED

435. The Report of the President's Commission on Campus Unrest. Including Special Reports: The Killings at Jackson State; The Kent State Tragedy. N.Y.: Arno, 1970. 529 pp. $5.95. (Report also appearing in The Chronicle of Higher Education, V:2, October 5, 1970, pp. 2-24)

The Scranton Commission report on "a crisis of violence and understanding," finding that most student protesters are neither violent nor extremist. Many recommendations for law enforcement agencies, the President, governments, universities, and students. RECOMMENDED

436. Carnegie Commission on Higher Education. Dissent and Disruption: Proposals for Consideration by the Campus. A Special Report of the Commission. N.Y.: McGraw-Hill, April 1971. Text also appears in The Chronicle of Higher Education, March 15, 1971, pp. 11-14.

The Carnegie Commission "generally endorses" the report of the President's Commission on Campus Unrest (the Scranton Commission) and recommends that "Evaluation of and response to events on a campus be based upon the distinction between dissent and disruption." A model "Bill of Rights and Responsibilities for Members of the Institution" is proposed for adaption by all campuses. RECOMMENDED

437. KENISTON, Kenneth and Michael LERNER, "The Unholy Alliance Against the Campus," The New York Times Magazine, November 8, 1970, pp. 28-29, 56-86.

A hard-nosed overview of student protest data in support of the assertion that both the extremist right and the extremist left "are allied in blaming the campuses for unrest." The authors point out that the absolute number of protests have not increased dramatically in the past six years, although the number of protests concerned with off-campus issues has increased sharply; each side uses distorted charges

of "police brutality" or "student violence" to recruit new supporters; faculty support or leadership of disruptive and violent protests was extremely rare; the major extremist charges against the university--improper discipline, indoctrination, and politicization--are all false; there are fewer protests per 10,000 students at large institutions than at small ones; only 4% of college seniors judge higher education as "basically unsound," although there is no relationship between a student's educational dissatisfaction and his involvement in protests; campus characteristics have a negligible effect on student protest.

"We conclude that most political discussions of campus unrest bear almost no relationship to the known facts. They are a mixture of misinformation, innuendo, stereotyping and falsification." (p. 83)
RECOMMENDED

438. Confrontation: A Newsletter from The Lemberg Center for the Study of Violence. Special Issue on "Explanations of Student Unrest." Waltham, Mass.: Brandeis University, April 1970. 23 pp. Free.

A scholarly survey of the literature, as concerns participants, issues and goals, processes, and outcomes. The area of concern, however, is limited to colleges and does not cover high school protests. A bibliography and a summary of field research and case studies cites about 70 items on student dissent and violence--the most extensive bibliography for this area that is known to this compiler.

439. SCHWARTZ, Edward (ed.). Student Power: Philosophy, Program, Tactics. Washington: National Student Association, 1968. 410 pp.

Provides different models for student participation in institutional policy formation.

440. FARBER, Jerry. The Student as Nigger: Essays and Stories. N.Y.: Contact Books, August 1969; Pocket Books, September 1970. 142 pp. $.95.

The pungent title essay of this policy manual for institutional clients is already an underground classic, having appeared (by Farber's estimate) in about 500 publications. But far more is offered here. "The Student and Society: An Annotated Manifesto" begins with the assertion that "School is where you let the dying society put its trip on you . . . it's not what you're taught that does the harm but how you're taught. Our schools teach you by pushing you around, by stealing your will and your sense of power . . . Students can change things if they want to because they have the power to say 'no'." (p. 17)

In "The Four-Fold Path to Student Liberation," Farber advocates The Way of Direct Action (non-violent), The Way of the Provo (not always practical but always aesthetic), The Way of the Square (student government) and The Way of the Self ("When people stop playing

(cont'd)

'student,' they will be able to learn without surrendering themselves in exchange.") Also see "A Young Person's Guide to The Grading System" and a brilliant satire of academic behaviorists: "Teaching Johnny to Walk: An Ambulation Instruction Program for the Normal Preschool Child."

Whether or not one is sympathetic, educators should recognize that volumes such as this are increasingly influential in shaping educational policy. RECOMMENDED

441. American Civil Liberties Union. Academic Freedom and Civil Liberties of Students in Colleges and Universities. N.Y.: ACLU (156 Fifth Ave., New York, N.Y. 10010), 1970. 48 pp.

Advocates that students should be allowed to participate in "an effective capacity" in deciding policy on all matters affecting their education and student life. Provides guidelines for student rights on such subjects as freedom in the classroom, publications, personal freedom, discipline, and records.

442. BELL, Daniel, "Quo Warranto?--Notes on the Governance of Universities in the 1970's," The Public Interest, No. 19, Spring 1970, pp. 53-68.

A discussion of governance in the context of an assortment of observations on Vietnam, the blacks, the multiplication of social problems, the post-industrial society, and "the new sensibility" of anti-institutionalism and anti-intellectualism.

443. BRICKMAN, William W. and Stanley LEHRER (eds.). Conflict and Change on the Campus: The Response to Student Hyperactivism. N.Y.: School and Society Books, 1970. 528 pp. $9.75.

Analyzes causes of U.S. and foreign student unrest and offers proposals for solutions.

444. CAFFREY, John, "Letter from Tomorrow," AAUP Bulletin, 54:3, September 1968, pp. 323-324.

An anti-utopian scenario, seen through the eyes of a foreigner on May Day 1978. American universities utilize a tight system of security, with badges, television surveillance of classrooms, and automatic controls to seal classroom doors and flood the rooms with violence-inhibiting chemical sprays. With the disappearance of authority, students and faculty dress, speak, and think alike. Disputes over "truth" and the granting of degrees are determined by student vote. Admission is by ethnic quota, with proportionate representation of all social classes.

445. DIETZE, Gottfried. Youth, University, and Democracy. Baltimore: Johns Hopkins, 1970. $6.50.

Holds that universities have failed in their responsibility to foster

an objective search for truth through scholarship, and appeals to faculties and administrators to reassert their capacities for creative leadership.

446. DOBBINS, Charles G. and Calvin B.T. LEE. Whose Goals for American Higher Education? Washington: American Council on Education, 1968. 241 pp.

"Brings together the views of the main constituencies of American colleges and universities--students, faculty, administrators, trustees, and public leaders . . . each giving different answers to the questions, Whose goals? Which goals? And how may they best be achieved? . . . Addressed to all who are concerned with the direction and purpose of higher education." (ACE catalog)

447. The Embattled University. Daedalus, 99:1, Winter 1970.

448. FISK, Winston M., "A System of Law for the Campus: Some Reflections," The George Washington Law Review, 38:4, May 1970, pp. 1006-1025.

449. HABERMAS, Jurgen. Toward a Rational Society: Student Protest, Science, and Politics. Translated by Jeremy J. Shapiro. Boston: Beacon, 1970. $5.95.

450. HERSEY, John. Letter to the Alumni. N.Y.: Knopf, October 1970; Bantam, February 1971. 179 pp. $1.25 paper.

A brief and simply-written essay by a well-known novelist based on his experience as Master of Pierson College at Yale, especially during the 1970 May Day events in New Haven. After surveying these events, in the context of broader academic and social issues, a choice of two futures is presented. The first--American Repression--"is the easy future to reach. All we have to do is keep on going the way we are now." The other and tolerable future will be based on two essential elements of an atmosphere of trust and decentralization of power, a revolution of non-violence that will not just happen but will have to be achieved.

451. HOROWITZ, Irving Louis and William H. FRIEDLAND. The Knowledge Factory: Student Power and Academic Politics in America. Chicago: Aldine, 1970. 354 pp. $9.75.

452. HOWARD, John A. and H. Bruce FRANKLIN. Who Should Run the Universities? Washington: American Enterprise Institute for Public Policy Research (1200 17th St.), 1971. $5.75.

Part of the Rational Debate Seminars, containing views of the two spokesmen, their rebuttals, and their discussions with a seminar of informed experts, including the press.

453. KEETON, Morris. Shared Authority on Campus. Washington: American Association for Higher Education (One Dupont Circle), March 1971. $3.75.

Analyzes governance on 19 campuses and recommends approaches for increased effectiveness.

454. KRUYTBOSCH, Carlos E. and Sheldon L. MESSINGER (eds.). The State of the University: Authority and Change. Beverly Hills: Sage Publications, 1970. 379 pp. $10.00; $4.50 paper.

"The papers collected in this volume share a concern with the problem of authority in the university--its changing bases, uses, emergent forms, and prospects. On the one hand, the relationship of the university to society is changing; on the other hand, the internal constitution is also changing. The main question is: 'Can a form of authority be found which will at once accommodate these changes and insure the freedom essential to teaching, learning, innovation, and communication?' The authors offer no easy answers." (advt.)

455. LEONARD, George B., "Beyond Campus Chaos: A Bold Plan for Peace," Look, 33: June 10, 1969. pp. 73+.

456. MAYHEW, Lewis B. Arrogance on Campus. San Francisco: Jossey-Bass, 1970. $7.50.

Charges that students, faculty, administrators, and trustees have all acted arrogantly and without due concern for the rights of others. Advocates curriculum changes to meet developmental needs of students, a division of power wherever there is a legitimate area of concern, a new academic morality, and avoiding blindly punitive reactions.

457. McGRATH, Earl J. Should Students Share Power? A Study of Their Role in College and University Governance. Philadelphia: Temple University Press, 1970. $2.45 paper.

A consideration of the ways in which students can be admitted to a responsible share of power.

458. MILES, Michael. The Radical Probe: The Logic of Student Rebellion. N.Y.: Atheneum, March 1971. $7.95.

Analyzes the background and origins of the student movement, as well as the dynamics of the recurrent campus revolts.

459. MINTER, W. John and Patricia O. SNYDER (eds.). Value Change and Power Conflict in Higher Education. Berkeley: Center for Research and Development in Higher Education, 1969. 128 pp.

460. MORISON, Robert S. Students and Decision-Making. Washington: Public Affairs Press, 1970. 136 pp. $2.00 paper.

461. NICHOLS, David C. (ed.). Perspectives on Campus Tensions. Washington: American Council on Education, 1970. $3.50.

"Papers commissioned by the ACE Special Committee on Campus Tensions, discussing the present situation and the positions of students, faculty, administrators, and trustees, with suggestions for reducing discontent." (The Chronicle of Higher Education)

462. OTTEN, C. Michael. University Authority and the Student: The Berkeley Experience. Berkeley: University of California Press, 1971. 222 pp. $7.50.

"The author shows that the crisis of university authority is just one manifestation of a deep-rooted rebellion against administrative centralization. He argues that organizational power must be democratized if conflict is not to become endemic." (advt.)

463. PENTONY, DeVere, Robert SMITH, and Richard AXEN. Unfinished Rebellions. San Francisco: Jossey-Bass, March 1971. $9.50.

Analyzes educational reform, radicalism, racism and reaction, campus discipline and student rights, faculty rights and obligations, police on campus, and the place of the university in society--issues that must be faced during the seventies.

464. VACCARO, Louis C. and James T. COVERT. Student Freedom in American Higher Education. N.Y.: Teacher's College Press, 1969.

Essays dealing with campus governance.

465. WALLERSTEIN, Immanuel. University in Turmoil: The Politics of Change. N.Y.: Atheneum, 1969. 147 pp. $4.95.

A deep, astute, and elegant essay by a political sociologist. "Three questions about the university in society have come to the fore--none of them new but all posed with renewed urgency and simultaneously. One question is the degree to which it is appropriate for the university . . . to collaborate with the government. The second question is the degree to which it is appropriate for the university to attach some priority to the needs and concerns of the oppressed groups within the society. The third question is how the university may itself best be governed . . . ." (p. 9)

"However it acts in relation to the government, the university is engaged in politics." (p. 11) Changing university linkages to government is seen as having relatively little impact on external policy, but changing university policies in view of their growing roles both as a mechanism for distributing social status and as urban property owners is seen as having a profound impact on society. Finally, overt clashes with the ethnic left and the ideological left are seen as part of a long-range trend to libertarian and participation values. "We are at the early stage of this conflict, the stage of initial testing

(cont'd)

of strength." (p. 133) This, in turn, will evolve to a stage of constitution-drafting, "perhaps for thirty years or so." (p. 129)

"Thus reform of curricula is not a primary issue. It will come about almost automatically as a consequence of the other changes we have been discussing, and it will not come in any significant measure without them." (p. 146) RECOMMENDED

466. WALLERSTEIN, Immanuel and Paul STARR (eds.). The University Crisis Reader. Vol. I: The Liberal University Under Attack. Vol. II: Confrontation and Counterattack. N.Y.: Random House, February 1971. $10.00 each; $2.45 each in Vintage paperback.

467. WILHELMSEN, Frederick (ed.). Seeds of Anarchy: A Study of Campus Revolution. Dallas, Texas: Argus Academic Press, 1970. 128 pp.

A symposium of nine conservatives, viewing the breakdown in traditional values, "The New Totalitarians," etc.

468. ROURKE, Francis E. and Glenn E. BROOKS. The Managerial Revolution in Higher Education. Baltimore: Johns Hopkins, 1966. 184 pp.

A thorough analysis, based on questionnaires and interviews, that estimates the degree to which more rationalized college and university administration has taken place, as regards use of EDP equipment, offices of institutional research, and allocation of resources. Several of the conclusions are that the potential of computers is still largely unrealized, institutional self-study will become increasingly common and varied, and that there is an "unmistakable" trend toward more rational procedures in the management of money and space. The emerging style of university administration is toward greater candor, a cabinet style of governing, and new forms of decision-making. One of the great unresolved questions is whether the new managerial techniques lead to a centralization of power. RECOMMENDED

469. PHILLIPS, Ellis L. A New Approach to Academic Administration: The Phillips Program of Internships. N.Y.: Columbia University, Teacher's College Press, 1969.

"This book covers the major current problems of college and university administration in the United States and discusses . . . existing and proposed efforts to identify and prepare future leaders of the academic world." (advt.)

470. BURNS, Gerald P. Trustees in Higher Education: Their Functions and Coordination. Independent College Funds of America, Inc., 1966. 194 pp.

A simply-written how-to-do-it book for trustees, with the final chapters, "The Future of the Trusteeship" and "The Future of Higher Education" summarizing various trends.

471. EULAU, Heinz and Harold QUINLEY. State Officials and Higher Education: A Survey of the Opinions and Expectations of Policy-Makers in Nine States. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, March 1970. 224 pp. $6.95.

C. General Curriculum

472. DRESSEL, Paul L. and Frances H. DeLISLE. Undergraduate Curriculum Trends. Washington: American Council on Education, 1969. 83 pp. $2.00.

A thorough analysis of change in the 1957-1967 period, as indicated by the course catalogs of 322 institutions representative of types, control, size, and location.

"The trends substantiated by this study are not great in number and less extensive in nature than one might have expected considering the curricular ferment of the past decade. There are definite trends toward the reduction in specific requirements in particular subjects, but the overall pattern of general and concentration requirements has changed but slightly. The result is that students have some increased degree of flexibility in how they fulfill requirements. To some limited extent, mathematics and the natural sciences have assumed a stronger position in the curriculum." (p. 74)

"The most marked curricular changes are in those aspects which have been labeled as individualization: study abroad, work study, community service, honors, independent study, comprehensive examinations . . . However, this approach (studying catalogs) provides no indication of the specific nature, quality, or number of student involved in these programs . . . Careful reading raises doubts that these features have really been integrated into the total program, however, and this brings forward again the point that most of what passes as innovation is really not new." (pp. 75-76)

473. College Entrance Examination Board. The Challenge of Curricular Change. N.Y.: CEEB, 1966. 181 pp.

"Explores, defines, and makes recommendations about the nature of recent curricular reforms in the secondary schools, the responses of the colleges, the effects on students, and the challenges for the future." (CEEB catalog) 17 papers, including "Training Responsible Citizens: The Unfinished Agenda" by Stephen K. Bailey.

474. SCHWAB, Joseph J. College Curriculum and Student Protest. Chicago: University of Chicago Press, 1969. 303 pp.

"A distinguished educator asserts that protest is a symptom and the disease is the curriculum. This diagnosis proceeds to specific prescriptions for cure . . . shows how curriculum must be redesigned to

(cont'd)

teach the principles of thought and practical choices and to allow undergraduates to become truly part of the intellectual community from which they are at present alienated." (advt.)

475. SNYDER, Benson R., M.D. The Hidden Curriculum. N.Y.: Knopf, 1971. $5.95.

A psychiatrist's analysis of a major cause of student unrest in higher education.

476. MAYHEW, Lewis B. Contemporary College Students and the Curriculum. Atlanta: Southern Regional Education Board, 1969. 86 pp.

Proposes that student unrest stems largely from an inadequate curriculum, and advocates wider and more flexible learning experiences.

477. EPSTEIN, Herman T. The Strategy for Education. N.Y.: Oxford University Press, 1970. 136 pp. $4.95.

Proposes a new research method of teaching--a technique already employed in a dozen major universities in three countries. "By encouraging students to re-create intellectually the course of research in various fields, it vividly communicates the excitement of discovery." (advt.)

478. LITT, Edgar. The Public Vocational University: Captive Knowledge and Public Power. N.Y.: Holt, Rinehart, and Winston, 1969. 159 pp. $3.95 paper.

Views higher education as a "captive domain" gathering vocational knowledge for political ends, and advocates a genuine liberal arts curriculum with emphasis on the humanities and social sciences, and on human development ends.

479. FAUST, C. H. and J. FEINGOLD (eds.). Approaches to Education for Character: Strategies for Change in Higher Education. N.Y.: Columbia University Press, July 1969.

480. BECKER, Ernest. Beyond Alienation: A Philosophy of Education for the Crisis of Democracy. N.Y.: George Braziller, 1969.

"Due to the unprecedented rapidity of social change and concomitant fragmentation, man has lost his sense of wholeness and meaning: his creativity and freedom are today constricted at every level." Applied to the core college curriculum the author advocates "a unified view of man based on the authentic insights of the Enlightenment and reinforced by all that psychology, psychiatry, sociology, anthropology, and theology have discovered about man in modern times." (book club advt.)

481. BELL, Daniel. The Reforming of General Education: The Columbia College Experience in its National Setting. N.Y.: Columbia University Press, 1966. 320 pp.

Many policy recommendations based on a conscious consideration of the future.

482. SMITH, R. I. (ed.). Men and Societies: Experimental Courses in the Humanities and Social Sciences in Schools, Colleges, and Universities in Great Britain and the United States. N.Y.: Humanities Press, November 1969.

483. TUSSMAN, Joseph. Experiment at Berkeley. N.Y.: Oxford University Press, 1969. 139 pp.

A brief discussion of The Experimental Program which "was conceived as an attempt to reincarnate the spirit and principles of Meiklejohn's Experimental College at the University of Wisconsin in the 1920's. The Berkeley program features a mandatory two-year curriculum largely involved with in-depth study of classics as an approach to "fundamental human problems."

484. HATCH, Winslow R. The Experimental College. Washington: U.S. Office of Education, New Dimensions in Education, No. 3, 1960. 13 pp. OE-50010.

"A survey of experimental programs making use of independent study and other new approaches to education." (USOE Publications Catalog)

485. MORRIS, William H. (ed.). Effective College Teaching: The Quest for Relevance. Published for the American Association for Higher Education by the American Council on Education. Washington: ACE, 1970. 162 pp. $3.50, paper.

486. RUNKEL, Philip, Roger HARRISON, and Margaret RUNKEL (eds.). The Changing College Classroom. San Francisco: Jossey-Bass, October 1969. 368 pp. $9.50.

"Original reports of innovations in college teaching written for this book by . . . college teachers who describe their work in experimental colleges in state universities, liberal arts colleges, urban colleges, private religious colleges, junior colleges, and a Negro college . . . The classes discussed range in size from a dozen to well over a thousand students. The subjects range from mathematics, speech, and writing to psychology, organizational management, and creativity . . . A commonality of goals and an underlying theory unite the underlying practices and experiments: increasing the relevance of education to meet the values and needs of students and increasing the students' freedom, self-direction, and learning-how-to-learn." (advt.)
RECOMMENDED

487. ARROWSMITH, William, "The Future of Teaching," The Public Interest, No. 6, Winter 1967, pp. 53-67.

A well-known scholar in the humanities decries the decline of scholarship to professional and technocratic forms at the expense of learning, and advocates "a new professoriate of such power that it can challenge the supremacy of the research departments." (p. 65)

488. KIRK, Russell. The Intemperate Professor and Other Cultural Splenetics. Baton Rouge: LSU Press, 1965. 163 pp.

Essays by a leading conservative. Especially see "American Colleges: A Proposal for Reform" (pp. 47-58; reprinted in Mayhew, Higher Education in the Revolutionary Decades), in which an argument is made for maintaining the distinctiveness of the small private liberal arts college in contrast to "Behemoth University." The college should teach enduring truths within a concise curriculum, and should abandon vocationalism, specialized and professional studies, athletics, and other extra-curricular activities. The elective feature should be reduced to a minimum, for "the undergraduate ordinarily is not yet capable of judging with discretion what his course of studies ought to be." In addition to improving human reason, "The college should inculcate in its students a sense of diffuse gratitude toward the generations that have preceded us in time . . ." A refreshingly antique essay.

Also see "The Uninteresting Future" (pp. 143-151) in which Kirk argues against boredom and the conversion of town and country into "one great hygienic slum."

489. BURNETT, Collins W. and Frank W. BADGER (eds.). The Learning Climate in the Liberal Arts College: An Annotated Bibliography. Charleston, W. Va.: Morris Harvey College, January 1970. 87 pp. (Available from The College Store, 2300 MacCorkle Ave.)

About 600 items, largely journal literature from 1950-1969, with brief non-critical annotations. Categories include the liberal arts approach, curriculum, teaching methods and the new media, and the teaching-learning process.

D. Disciplines and Professions

490. STENT, Gunther S. The Coming of the Golden Age: A View of the End of Progress. N.Y.: Natural History Press (for the American Museum of Natural History), 1969. 146 pp. $4.95.

A molecular biologist argues that the arts and sciences are reaching the logical end of their evolution, with the Golden Age viewed as the last stage of history: "a re-creation of Polynesia on a global scale" (p. 137); the fruit of the frantic efforts of "Faustian Man" whereby leisure time is devoted to sensual pleasures.

491. GLASS, Bentley, "Science: Endless Horizons or Golden Age?", Science, 171: January 8, 1971, pp. 23-29.

The AAAS presidential address delivered December 1970 in Chicago, examining the extremes in the spectrum of belief in the future of science. Contrasting Vannevar Bush' Endless Horizons (1946) with Roderick Seidenberg's Posthistoric Man (1950) and Gunther Stent's The Coming of the Golden Age (1969), Glass sides with the Golden Age authors by observing that "so awesome is already the accelerating rate of our scientific and technological advance that simple extrapolation of the exponential curves shows unmistakably that we have at most a generation or two before progress must cease." (p. 26)

"The next age of scholarship will no doubt promote processors and analysts who need only to delve in the mountains of extant scientific and technological literature for forgotten and uncomprehended items of knowledge." (p. 27) But Glass appears to be ignoring the social sciences, as well as the need for disseminating scientific information, both hard and soft.

492. GLASS, Bentley. The Timely and the Timeless: The Interrelationships of Science, Education, and Society. N.Y.: Basic Books, 1971. $4.95.

Looks at the implications of the gap between public understanding and scientific knowledge. "His plan of action: to blend once and for all all subject matter with method of inquiry in science education, and to make mandatory the regular return of professional people to the university for continuing education." (advt.)

493. MARCH, Michael S. Federal Budget Priorities for Research and Development. Chicago: University of Chicago, Center for Policy Study, 1970. $1.50.

"A study of the federal government's role in science, including a detailed analysis of President Nixon's 1971 federal budget for science programs." (brochure)

494. U.S. Congress. House Subcommittee on Science, Research, and Development. Toward a Science Policy for the United States. Washington: USGPO, November 1970.

Advocates a task force to draft a statement of national science policy and a new umbrella agency to coordinate research (The National Institues of Research and Advanced Studies).

495. HAMMOND, G. S., "The Future of Chemical Science," Chemical Technology, January 1971, pp. 24-26.

Charges that chemistry has become conservative, acquisitive, and self-propagating in the past few decades and that it could disappear as an explicit discipline and become absorbed elsewhere. Although not

bemoaning this possibility, Hammond advocates the enunciation of long-range prospects for the various branches of chemistry.

496. National Academy of Engineering. Engineering for the Benefit of Mankind. Washington: NAE Printing Office (2101 Constitution Ave.), 1970?. 160 pp. $5.50 paper.

Based on a University of Michigan symposium held in fall 1967. Especially see Jay W. Forrester, "Engineering Education and Engineering Practice in the Year 2000."

497. DeSIMONE, Daniel V. (ed.). Education for Innovation. Oxford: Pergamon Press, 1968. 180 pp.

14 articles derived from a Woods Hole conference on creative engineering education, sponsored by the National Academy of Engineering, NSF, and the U.S. Department of Commerce. "What is suggested is a recognition of the essential nature and role of engineering, the learning of engineering by behaving like an engineer, and an increased emphasis on the excitement of discovering for oneself. In short, what is proposed is that engineering education be kept alive and relevant--that it truly be education for innovation." (p. 20)

498. STEINHART, John S. and Stacie CHERNIACK. The Universities and Environmental Quality--Commitment to Problem Focused Education. A Report to The President's Environmental Quality Council. Washington: Executive Office of the President, Office of Science and Technology, September 1969. USGPO. 71 pp. $.70.

A report on several multidisciplinary environmental programs. Despite some promising starts, there is still a severe shortage of ecology professionals, and the report suggests actions that the federal government can take, such as assisting in the formation of colleges and universities of Schools of the Human Environment.

499. National Academy of Sciences, Committee on Science and Public Policy (COSPUP). The Life Sciences. Washington: NAS Printing and Publishing Office (2101 Constitution Ave.), December 1970. 526 pp. $10.50.

The last of a series of COSPUP reports to establish needs and priorities in various areas of science. Produced by a 29 member committee, there are 31 pages of recommendations, including a request for an additional $250 million a year in federal support for biological research, and various educational reforms such as a core curriculum for biology undergraduates, instruction in "humanistic" biology for students in other fields of science, standardized Ph.D. programs, upgraded laboratories, and a special curriculum for high school and junior college teachers. According to one reviewer, this report "would appear to be an unfortunate waste of effort" (Robert J. Bazell, Science, December 18, 1970, p. 1286).

500. BENDER, A. Douglas et. al., "Delphic Study Examines Developments in Medicine," Futures, 1:4, June 1969, pp. 289-303.

The results of a Delphi study conducted for Smith, Kline & French Laboratories as an aid to planning for the pharmaceutical market. Covers areas of biomedical research, diagnosis, medical therapy, health care, and medical education. From these results, a scenario of "Medicine 1980" is constructed. (pp. 294-300)

501. Carnegie Commission on Higher Education. Higher Education and the Nation's Health: Policies for Medical and Dental Education. A Special Report of the Commission. N.Y.: McGraw-Hill, October 1970. 128 pp. $2.95.

The profound changes stemming from the Flexner report of 1910 have resulted in a high quality of training and service. This present report, placing itself in the context of a"great transformation already under way,"recommends the creation by 1980 of 126 health education centers and 9 health-science centers (in addition to the 27 planned for construction during the decade); increasing the number of medical doctors by 50% and the number of dentists by 20%, shortening the training period of physicians from 8 to 6 years and of dentists from 4 to 3 years, increasing opportunities for women and members of minority groups, increasing federal support for medical education, establishing a National Health Manpower Commission, creating a voluntary health services corps, reducing the student-faculty ratio while creating other economies, improving the curriculum, and creating several paths to the professional degree; in short, a plan is offered for the entire system of health care delivery in the United States. RECOMMENDED

502. KREVANS, Julius R. and Peter G. CONDLIFFE (eds.). Reform in Medical Education: The Effect of Student Unrest. Washington: National Academy of Sciences, 1970. 244 pp. $7.95.

Proceedings of an international colloquium on reform in medical education, Bethesda, Md., April 1969. Advocates a redefinition of the role of the medical schools in the community and the participation of students in planning curriculums.

503. "National Commission for the Study of Nursing and Nursing Education: Summary Report and Recommendations," American Journal of Nursing, 70: February 1970, pp. 279-294.

Also see a forthcoming special report by the Carnegie Commission on Higher Education, New Students and New Places, which will devote considerable attention to changes in the education of nurses and allied health workers.

504. LIDZ, Theodore and Marshall EDELSON (eds.). Training Tomorrow's Psychiatrist: The Crisis in Curriculum. New Haven: Yale, 1970. $7.50; paper $1.95.

505. WATTS, Donald G. (ed.). The Future of Statistics: Proceedings of the University of Wisconsin Conference, 1967. N.Y.: Academic Press, 1968. 315 pp.

506. NATIONAL ACADEMY OF SCIENCES, Committee on Science and Public Policy, and SOCIAL SCIENCE RESEARCH COUNCIL, Committee on Problems and Policy. The Behavioral and Social Sciences: Outlook and Needs. A Report by the Behavioral and Social Sciences Survey Committee. Englewood Cliffs: Prentice-Hall, 1969. 320 pp. $7.95.

A systematic self-portrait by 6-10 member panels for each of ten social science disciplines, largely based on a questionnaire survey of research units at 135 universities. Separate reports are being published for each of the disciplines: anthropology, economics, history as social science, political science, sociology, psychology, geography, linguistics, psychiatry, and statistics.

This summary volume provides a good layman's overview of the social sciences: what they do, how they do it, and what they can be expected to contribute toward the formulation of public policy. Major recommendations are as follows: a system of social indicators culminating in an Annual Social Report to the Nation that identifies and measures fundamental changes in the quality of life for all people; in support of the above, a special technical commission to investigate and recommend procedures for a national system of statistical data reporting designed for social scientific purposes; the creation of new interdisciplinary programs of teaching and research symbolized by the organizational concept of a Graduate School of Applied Social Research; and an annual increase of 12-18% in federal support of basic and applied research. RECOMMENDED

507. Special Commission on the Social Sciences of the National Science Board. Knowledge Into Action: Improving the Nation's Use of the Social Sciences. Washington: National Science Foundation, NSB 69-3, May 1969. 95 pp. $.75.

Various recommendations focusing on revitalizing existing institutions, establishing new social institutions, and developing better channels for the flow of social science resources into American life.

508. GOULDNER, Alvin. The Coming Crisis in Western Sociology. N.Y.: Basic Books, 1970. 528 pp. $12.50.

A lengthy essay on social theory and social theorists, addressed to Gouldner's fellow sociologists, although perhaps with import for those who study education, either as sociologist or educator. A continuing movement of Functionalism toward Marxism is seen, with the equilibrium point as a kind of "Keynesian Functionalism." At the same time, "there will be increased development of a more distinctly Marxist and radical sociology that will have an autonomous base in the emerging generation of younger sociologists." (p. 443) These two trends signal "a transformation of the total structure of academic sociological perspectives

. . . something that has hardly ever before existed." (p. 443) To further this evolution, the final chapter argues for a "Reflexive Sociology" which means that "we sociologists must--at the very least--acquire the ingrained habit of viewing our own beliefs as we now view those held by others." (p. 490)

509. EASTON, David, "The New Revolution in Political Science," The American Political Science Review, 63:4, December 1969, pp. 1051-1061. (Presidential Address delivered to the 65th Annual Meeting of the American Political Science Association, September 1969, New York City)

Describes a new future-oriented "post-behavioral revolution" with its battle cries of relevance and action, taking place not only in political science but simultaneously in the other social sciences. It is seen as "the most recent contribution to our collective heritage" and "an opportunity for necessary change."

Several of the tenets that are suggested for the post-behavioral credo are: substance must precede technique, behavioral science conceals an ideology of empirical conservatism, to know is to bear the responsibility for acting and to act is to engage in reshaping society, etc. "The search for an answer as to how we as political scientists have proved so disappointingly ineffectual in anticipating the world of the 1960's has contributed significantly to the birth of the post-behavioral revolution." (p. 1053) "Both our philosophers and our scientists have failed to reconstruct our value frameworks in any relevant sense and to test them by creatively contemplating new kinds of political systems that might better meet the needs of a post-industrial, cybernetic society." (p. 1058) RECOMMENDED

510. EULAU, Heinz and James G. MARCH (eds.). Political Science: The Behavioral and Social Sciences Survey. Englewood Cliffs: Prentice-Hall, 1969. 148 pp. $5.95.

A part of the NAS-SSRC project (item 506), this report discusses changing frontiers of theory and research, personnel trends, prospects for research, and education for research. 15 recommendations are made, including national study centers, increasing the number of "strong" departments, new training programs, and expanded NSF funding for political science research.

511. SURKIN, Marvin and Alan WOLFE (eds.). An End to Political Science: The Caucus Papers. N.Y.: Basic Books, 1970. $7.95.

As an adjunct to damning the discipline for conservatism and irrelevance, some of the papers contend that the teaching of political science fails to prepare the young to cope with the realities of power in America.

512. LASSWELL, Harold D. The Future of Political Science. N.Y.: Atherton, 1964. 256 pp.

513. MARINI, Frank. Toward a New Public Administration: The Minnowbrook Perspective. San Francisco: Chandler Publishing Co., March 1971. $7.00 text ed.; $3.95 paper.

514. DROR, Yehezkel. Teaching of Policy Sciences: Design for a Post-Graduate University Program. Santa Monica: The RAND Corporation, P-4128, June 1969. 27 pp. (Also see Sunderland, item 909)

"Presents a basic design for a post-graduate university program in policy sciences. Its main purposes are to raise issues and bring out the main dimensions of policy sciences teaching, rather than supply definite solutions or a detailed 'model program'." (Introduction)

515. HABER, David and Julius COHEN (eds.). The Law School of Tomorrow. New Brunswick, N.J.: Rutgers University Press, 1968. $10.00.

"Opinions of objectives and curricula for university law schools of the future expressed in a symposium by a group of distinguished judges, lawyers, and scholars." (The Chronicle of Higher Education)

516. ELDREDGE, H. Wentworth, "Education for Futurism in the United States: An On-Going Survey and Critical Analysis," Technological Forecasting and Social Change 2 (1970), pp. 133-148. Also see a briefer version, "Education in Futurism in North America," The Futurist, IV:5, December 1970, pp. 193-196.

An excellent survey of futures research and teaching. As of July 1970, approximately 90 institutions of higher learning (of which 7 were in Canada) were offering futurism or technological forecasting courses, with perhaps 100 academics involved in all of North America.

However, the focus and quality of the courses varies immensely. Generally, the intellectual roots were shallow, with very little awareness "of mankind's age-old Promethean strivings." Furthermore, "there was almost a complete lack of any implicit, much less explicit, social change theory." Various predictive techniques and teaching methods used are also covered, and the article is concluded with 17 summary propositions on the teaching of futurism.

517. "Universities Offer Courses in the Future," The Futurist, April 1969, pp. 38-40.

Brief notes on future-oriented courses being taught at Columbia, Princeton, Dartmouth, Case Western Reserve, San Jose State University, University of Texas, SUNY-Albany, and University of California at Berkeley, Los Angeles, and Davis. For further information on college-level courses on the future, see item 807.

518. DRUCKER, Peter F. (ed.). Preparing Tomorrow's Business Leaders Today. Englewood Cliffs, N.J.: Prentice Hall, 1969. 290 pp.

23 essays by business leaders and business educators, based on a NYU symposium. Essays are divided into four sections: the changing environment, new dimensions of business, international business, and the mission of the business school. Although suffering from the usual limitations of an anthology, the focus is exemplary. Of special interest are articles on the information revolution, managing the knowledge organization, the multi-national corporation, and the corporation as an educational institution.

519. LING, Cyril C. (ed.). The Next Half Century in Higher Education for Business. St. Louis: American Association of Collegiate Schools of Business, 1969 (?).

Addresses presented during the Association's 50th annual meeting.

520. BASS, Herbert J. The State of American History. N.Y.: Quadrangle, 1970. 480 pp. $15.00.

"This collection of twenty original essays by distinguished historians represents the most serious attempt in recent years to see where we have been, what we are doing now, and what are the prospects for the future in the interpretation of American history." (advt.)

521. The Future of the Humanities. Daedalus, 98:3, Summer 1969.

17 articles on trends and issues.

522. GREENBAUM, Leonard A. and Rudolf B. SCHMERL. Course X: A Left Field Guide to Freshman English. Philadelphia: Lippincott, 1970. 224 pp. $2.45.

A witty overview of Freshman English addressed to the two million students who must annually survive this ordeal. After analyzing the academy, personnel procedures, course content, assignments, and the history of Course X, the authors review various strategies for student survival. After rejecting the traditional strategies of suffering through, opting out, conning the course, and throwing oneself at the mercy of the teacher, it is recommended that students act to change the course into a learning situation that serves students' needs instead of the teacher's. This strategy is most readily carried out by forming a team for dealing with classroom situations and assignments. Course X is cynical, but not strident; it accepts the academic status quo, while pointing out that students can shape events to their interests--a form of educational policy-making at the "lowest" but perhaps most important level.

523. ROBINSON, Armstead L. et. al. (eds.). Black Studies in the University: A Symposium. New Haven: Yale University Press, 1969.

(cont'd)

Eleven papers from a May 1968 symposium sponsored by the Black Student Alliance at Yale.

524. On the Future of Art. Sponsored by the Solomon R. Guggenheim Museum. N.Y.: Viking, 1970. 134 pp. $7.50; $3.45 paper.

Includes "Art: Communication or Esoteric?" by Arnold J. Toynbee, "Architecture: Silence and Light" by Louis I. Kahn, "Art and the Structuralist Perspective" by Annette Michelson, "Creating the Creative Artist" by B. F. Skinner, "Phenomenal Art: Form, Idea, and Technique" by James Seawright, "The Aesthetics of Intelligent Systems" by J. W. Burnham, and "Art as a Form of Reality" by Herbert Marcuse.

525. SANDERS, Irwin T. and Jennifer C. WARD. Bridges to Understanding: International Programs of American Colleges and Universities. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, December 1970. 304 pp. $7.95.

Finds international studies still largely underdeveloped and present levels of activity in serious jeopardy. Suggestions are made for trustees, the president and other administrators, the faculty, and students. Especially note the appeal to students to initiate action in order to maximize their intellectual development in international and intercultural learning and experience.

526. U.S. House of Representatives, Committee on Education and Labor, Task Force on International Education. International Education: Past, Present, Problems and Prospects. Washington: 89th Congress, 2nd Session, House Document No. 527, October 1966. 565 pp.

About 70 articles concerning higher education and world affairs, internationalizing the curriculum, educational exchanges, education for development, and organizing for international education.

527. Education and World Affairs. The University Looks Abroad: Approaches to World Affairs at Six American Universities. N.Y.: Walker and Co., 1965.

These thorough case studies suggest a pervasive trend toward internationalization of institutions, staff, and curricula among major universities. This spirit of globalization appears to be tempered, however, by recent empirical studies combined with cutbacks in federal funding.

528. SPENCER, Richard E. and Ruth AWE (comps). International Educational Exchange. N.Y.: Institute of International Education (809 UN Plaza, New York, N.Y. 10017), 1970. $6.00.

A comprehensive bibliography of writings in the area of international education, containing almost 4000 titles of books, articles, research reports (including dissertations and theses), pamphlets, and government documents.

E. Graduate Education

529. National Science Foundation. Toward a Public Policy for Graduate Education in the Sciences. Report of the National Science Board. Washington: USGPO, NSB 69-1, 1969. 63 pp. $.40.

Primarily addressed to graduate education and research in the natural sciences, the social sciences, and engineering, many of the conclusions of the report are nevertheless applicable to the arts and humanities. Graduate education is seen as having developed without an explicit national policy, and in that enrollments are expected to double and costs quadruple by 1980, substantial federal funding is seen as necessary. Recommendations are made to educational institutions, state and regional planners, and the federal government. "These recommendations are made in the firm conviction that no instrumentality of society can contribute more importantly to the future strength and well-being of the Nation and its citizens than does graduate education." (p. xii) Perhaps.

530. National Science Foundation. Graduate Education: Parameters for Public Policy. Report prepared for the National Science Board. Washington: USGPO, NSB 69-2, 1969. 168 pp. $1.25.

"Presents the statistical evidence, forward projections, analyses, and interpretations which underlie the conclusions and recommendations offered in the First Report . . . However, this is much more than an Appendix . . . It is both a unique analysis of the present status of graduate education and the source of a large body of information and useful correlations which should be invaluable to rational planning for graduate education and indeed for all of higher education." (p. iii) The three chapters cover dimensions of graduate education (no. institutions, distribution of enrollment), correlates of quality (high quality found largely in large institutions and large departments), and financial perspectives. Many public policy issues are raised, such as creating new institutions vs. expanding existing ones, geographic priorities, offsetting a possible decline in quality during the next decade, etc.

531. EURICH, Alvin C., Lucien B. KINNEY, and Sidney G. TICKTON. The Expansion of Graduate and Professional Education During the Period 1966 to 1980. Studies in the Future of Higher Education, Report No. 2. N.Y.: The Academy for Educational Development, April 1969. 96 pp.

Based on a sample of 149 universities, all of which were visited in 1967 by a team under the direction of Lewis B. Mayhew. The universities studied expected a growth of 130% in graduate and professional school enrollments from 1967 to 1977. But their plans were frequently not written down in any detail, "nobody knows how much the new and expanded graduate programs will cost in the future," (p. 6) and it was implicitly expected that there would be extensive aid from the federal

(cont'd)

government. No cutbacks in programs are being planned anywhere: "the theory seems to be that society is going to need more of everything for decades ahead." (p. 6) This document may be somewhat outdated due to recent cutbacks in federal funding of science, and the more recent report by Mayhew (see below).

532. MAYHEW, Lewis B. Graduate and Professional Education, 1980: A Survey of Institutional Plans. An Essay Written for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, 1970. 38 pp. $3.95.

A brief but very important document, based on the site visits of 1967 (see above) as well as a second inquiry during 1968-69, involving 800 questionnaires of which 368 were returned. The findings are similar but more refined, and, as Clark Kerr notes in the foreword, "His data raise grave questions about federal policy, state policy, and the policies of individual institutions." Mayhew concludes that:

"This view of the future, based as it is on actual institutional expectations, leaves several inescapable impressions. Much of the planning presumes a continuation of practices and trends established during the 1960's. But there is serious doubt that this will happen. There could be in sight a serious oversupply of advanced-degree recipients, many of whom will have been educated in developing institutions without wide experience or reputation in graduate work. Whether this will be supported is moot. And equally unknown is what disposition will be made of the thousands of new Ph.D.'s and master's degrees. If the history of other oversupplies is repeated--that in engineering, for example--it seems likely that there will be a substantial upgrading of the training of teachers in lower levels of schooling and an upgrading of educational requirements in business and government." (p. 32)

Also of interest is an appendix listing the "Rank Order of Master's and Doctoral Programs Offered and To Be Offered by 1980." RECOMMENDED

533. SIEBER, Sam D. and Paul F. LAZARSFELD. Reforming the University: The Role of the Research Center. N.Y.: Columbia University, Bureau of Applied Social Research, February 1971. 180 pp.

Advocates research institutes as interdisciplinary superdepartments dealing with such broad academic areas as education, urban affairs, health, politics and government, and law and society. Graduate students would attend class only one year before entering an institute for perhaps two years of research leading to a dissertation. Students would work with a number of senior members on several different projects.

534. HEISS, Ann M. Challenges to Graduate Schools. San Francisco: Jossey-Bass, 1970. $9.75.

"Examines the role of the graduate institution and its value; the quality of graduate study; the effective training of teachers as

opposed to researchers; the publish or perish predicament; the structure and organization of graduate study; the role of faculty in guiding students who lack potential as well as those who show promise; methods for establishing inter-divisional plans: extra-organizational schools, institutes, centers; cluster graduate centers; new social developments involving students and faculty as copartners; and the articulation of undergraduate and graduate programs." (advt.)

535. U.S. Office of Education. Graduate Teaching Assistants in American Universities. Washington: USGPO, 1970. $.40.

"Reviews recent trends in graduate teaching assistants' programs and makes recommendations for the future." (The Chronicle of Higher Education)

F. Distinctive Institutional Types

536. KLOTSCHE, J. Martin. The Urban University and the Future of our Cities. N.Y.: Harper & Row, 1966. 149 pp.

The Chancellor of the University of Wisconsin at Milwaukee proposes basic functions for the urban university to fulfill in meeting the crisis of urban areas.

537. BIRENBAUM, William M. Overlive: Power, Poverty, and the University. N.Y.: Delacorte, 1969. 206 pp. $4.95; $1.95 paper.

The overlive society is the nonmilitary counterpart of overkill, resulting in a substantial number of citizens not sharing in technological and industrial success, or failing to discover any meaning in the success. Birenbaum sees the colleges and universities at the very center of the overlive predicament, with their schism between thought and action, their isolation from the dynamics of the city, and their twin organizing principles of time scarcity and knowledge monopoly--all resulting in a meaningless academic packaging system. Six proposals for renewal cover multilevel planning of education for youth in black urban communities, locating new institutions in ghettoes, viewing the ideal campus as the city, internship programs for all students, reorganizing knowledge around problems, and student freedom. Although not particularly deep and well-organized, this passionate and original analysis raises a number of critical questions. RECOMMENDED

538. Educational Facilities Laboratories. A College in the City: An Alternative. N.Y.: Educational Facilities Laboratories, 1969. 42 pp.

Based on the ideas in William Birenbaum's Overlive, and dealing with an alternative for the Bedford-Stuyvesant area of New York City. The aim is to create a university in which there are no walls and no outsiders, and where the community itself is viewed as the campus. Key elements involve "flexibility in the distribution of college facilities,

(cont'd)

the maintenance of the urban mix and joint occupancies, and the establishment of close links with every segment of the community." (p. 42)

539. GOODMAN, Paul. The Community of Scholars. N.Y.: Random House, 1962.

Advocates apartment-sized universities.

540. Carnegie Commission on Higher Education. From Isolation to Mainstream: Problems of the Colleges Founded for Negroes. A Report of the Commission. N.Y.: McGraw-Hill, February 1971. 86 pp. $1.95.

To help the country's 105 black colleges and universities emerge from their "historic isolation" (especially in the face of improved recruiting of black students and faculty by predominantly white institutions) the Commission recommends a tripling of federal support, preparation for a doubling of enrollment, the possible merger of several smaller schools, enrichment of existing curricula, and improved college preparatory programs for blacks to help reduce the costly remedial instruction now necessary at many black colleges.

541. LeMELLE, Tilden J. and Wilbert J. The Black College: A Strategy for Relevancy. N.Y.: Praeger, 1969. 144 pp. $10.00.

Argues that black Americans, in the new spirit of self-determination, need their own institutions. The LeMelles offer a "project-oriented design for change," fired by the ideology of "black pragmatic realism," and including proposals such as a national education consortia project, a college merger project, and a national manpower development and utilization center project.

542. WILCOX, Preston (comp.). The Black University: A Bibliography. N.Y.: National Association for African American Education, July 1969. 10 pp. Mimeo.

100 items, not annotated.

543. DUNHAM, E. Alden. Colleges of the Forgotten Americans: A Profile of State Colleges and Regional Universities. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, 1969. 206 pp. $5.95.

544. GAFF, Jerry G. and Associates. The Cluster College: Innovations and Consequences. San Francisco: Jossey-Bass, 1970. $8.50.

"Provides the first systematic study of the cluster college, a collegiate model which permits schools to preserve the best features of both the small college and the large university. The authors describe and analyze the purposes and practices of these schools, illuminating such details as the utility of the cluster concept, the various methods of accommodating cluster colleges in different universities, the innovations in curriculum, grading, instruction, governance, and residence requirements." (advt.)

545. RIESMAN, David, Joseph GUSFIELD, and Zelda GAMSON. Academic Values and Mass Education. N.Y.: Doubleday, 1970. $7.95.

Case studies of the college-within-a-college: Oakland and Montieth, set up in 1959 by Michigan State and Wayne State Universities respectively. "How they have survived--and why--is the subject of a fascinating, important report that draws some conclusions quite as controversial as those in Riesman's and Jenck's The Academic Revolution." (advt.)

546. JOHNSON, Byron Lamar. Islands of Innovation Expanding: Changes in the Community College. Beverly Hills, Cal.: Glencoe Press, 1969. 352 pp.

An authoritative report on a 1967-68 non-statistical survey of innovation in instruction at more than 200 junior colleges. From the context of change in society, education, and junior colleges in general, Johnson discusses specific innovations such as co-op work-study, programmed instruction, the systems approach to instruction, gaming. students as teachers, independent study, etc. Aids and obstacles to innovation are then discussed, with concluding comments on the need for evaluation. Several trends are extrapolated into the short-range future. RECOMMENDED

547. ALTMAN, Robert A. The Upper Division College. San Francisco: Jossey-Bass, 1970. 202 pp. $7.75.

A thorough history of the upper division college, concluding with a chapter of cautious "conjecture." Future institutions will probably place less emphasis than before on the liberal arts degree in favor of the newly developing Bachelor of Technology degree or its equivalent; they will be predominantly urban and will probably offer work through the master's degree. "Predicated upon assumptions of social need . . . upper division institutions are a logical response for a public system facing enrollment pressures at the junior year or a need for additional baccalaureate education. If junior colleges did not exist, if they were not predominantly public, or if the hesitancy to convert or expand them did not exist, upper division colleges would not develop in increasing numbers and locations." (p. 171) In turn, "the way in which future upper division institutions develop will greatly affect the development of existing junior colleges." (p. 175)

548. SHORES, Louis, Robert JORDAN, and John HARVEY (eds.). The Library College: Contributions for American Higher Education at the Jamestown College Workshop, 1965. Philadelphia: Drexel Press, 1966. 287 pp.

An anthology of 33 papers on the Library-College concept, in addition to background planning documents of the idea as elaborated at Jamestown College, North Dakota.

549. HAMILTON, Blair (ed.). Free Universities, Experimental Colleges, and Free Schools. Washington: National Student Association, 1968. 66 pp.

Lists a wide variety of innovations throughout the country.

550. LAUTER, Paul and Florence HOWE, "What Happened to the 'Free University'," Saturday Review, June 20, 1970 (condensed from the author's book, The Conspiracy of the Young, World 1970).

A history of free universities from their intellectual origins in 1962.

551. FISCHER, John, "Survival U: Prospectus for a Really Relevant University," Harper's, September 1969, pp. 12-22.

Viewing today's liberal arts education as incoherent and irrelevant, it is argued that at a minimum, any successful reform should be founded on a single guiding concept and capable of equipping young people to do something about the world. The idea of survival is the only idea that fits these specifications. Thus, at Survival U, the motto would be "What must we do to be saved?" Rather than being detached, all of the faculty would be committed to the cause. The biology department would concentrate on problems of population and pollution; engineering departments would stress waste disposal and where not to build dams and highways as well as how to build them; mathematics would teach social accounting; and government would look at why our institutions have done so badly and whether they can be renewed. Although brief and lightly written, the idea of Survival U warrants further exploration. RECOMMENDED.

552. The International Ecology University. Why and How: A Program. Berkeley, Calif.: International Ecology University Publications, 1970. 86 pp. Paper.

553. MADSEN, David. The National University: Enduring Dream of the U.S.A. Detroit: Wayne State, 1966. 178 pp.

The history of a proposal for a University of the United States, an idea first debated at the Constitutional Convention of 1787, which may once again enjoy a revival of interest throught the efforts of the Steiner Committee to establish a prestigious post-doctoral institution for study and research.

554. ZWEIG, Michael. The Idea of a World University. Edited with a foreword by Harold Taylor. Carbondale: Southern Illinois University Press, 1967. 204 pp.

A thorough exploration of a recurring idea for an institution "which would match on an intellectual scale what the United Nations was designed to accomplish in a political dimension . . . a rough estimate would be that since the end of World War I, more than one thousand

such proposals have been made." (Taylor in Foreword, pp. v-vi) Zweig explores the needs, alternatives (international exchanges, area study programs, etc.), the history of the proposal, and what needs to be done. RECOMMENDED

G. Facilities and Technology

555. ASHBY, Eric. Technology and the Academics: An Essay on Universities and the Scientific Revolution. N.Y.: Macmillan, 1958. 117 pp.

556. Educational Facilities Laboratories. Bricks and Mortarboards. N.Y.: EFL (477 Madison Avenue), November 1966. 168 pp. Free.

Five excellent overview articles by professional writers on classrooms, laboratories, libraries, dormitories, and campus design (especially see Alvin Toffler on the intellectual problems of the libraries of the future). "This book sets forth the difficult physical problems that beset American colleges and universities today, the far tougher physical problems looming just ahead, and an array of imperative reforms." (p. 163) The intent is to "produce buildings that serve rather than stifle higher education in the crucial years ahead." (p. 5) RECOMMENDED

557. "Membrane Structures For Living and Learning To Be Pioneered on Three Campuses," EFL College Newsletter 10, September 1970, pp. 2-7. (Available free from Educational Facilities Laboratories, 477 Madison Ave., New York, New York 10022)

Discusses the plans of Antioch College, La Verne College, and the Student Housing Cooperative at Princeton to employ the low-cost luminous membrane bubbles inspired by R. Buckminster Fuller.

558. U.S. Office of Education. College and University Enrollment and Physical Facilities Survey, 1965-1970. Washington: USGPO, OE-51004-19, September 1967. 6 pp. + 17 tables.

Ascertain plans to accommodate increased enrollments through 1970.

559. BOEHM, B. W. The Professor and the Computer: 1985. Santa Monica: The RAND Corporation, P-3527, 1967.

560. CAFFREY, John G. Computers in Systems of Higher Education. Santa Monica: Systems Development Corporation, SP-2213, December 1965. 11 pp.

561. TSCHIRGI, Robert D., "Regional and National Networks" in Ralph W. Gerard (ed.), Computers and Education. N.Y.: McGraw-Hill, 1967, pp. 275-303.

Discussion of broad trends and the need to develop communication

(cont'd)

networks for archival, inter-university, university-community, and international needs. Rest of Gerard volume tends toward a how-to-do-it discussion concerning computer applications.

562. U.S. President's Science Advisory Committee. Computers in Higher Education: Report of the President's Science Advisory Committee. Washington, USGPO, 1967.

H. Finance

563. KAYSEN, Carl. The Higher Learning, The Universities, and The Public. The Stafford Little Lectures, 1968. Princeton: Princeton University Press, 1969. 85 pp. $4.95.

The Director of the Institute for Advanced Study discusses the present allocation of federal funds to scientific research and higher learning, and proposes an alternative that "attempts to reconcile government support with the true interests of the universities." (advt.)

564. WOLK, Ronald A. Alternative Methods of Federal Funding for Higher Education. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, 1968 (?). 272 pp. $2.00.

565. BOWEN, William G. The Economics of the Major Private Universities. Berkeley: Carnegie Commission on Higher Education, 1968. 66 pp. $1.25.

As of spring 1967, Bowen analyzes economic trends and projects expenditures and income for major private universities to 1975-76, concluding that "in the absence of significant new developments, the economic squeeze already being felt by the major private universities is going to intensify greatly." (p. 54) Subsequent developments (economic recession and student unrest leading to an attrition of alumni contributions) have made the financial situation even bleaker.

566. CHEIT, Earl F. The New Depression in Higher Education. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, March 1971. 192 pp. $5.95.

Examines 41 private and public colleges and universities, finding 70% of them either "in financial difficulty" or "headed for trouble." The problem is seen as costs and income both rising on the whole, but costs rising at a slowly growing rate while income is growing at a declining rate. All types of institutions have been affected by this financial crisis, and even those not presently in trouble can expect severe problems if present trends continue. Decisions about reform in the next decade will therefore be influenced more by the financial situation than by any other factor. RECOMMENDED

567. FREEMAN, Roger A. Crisis in College Finance? Time for New Solutions. Washington: Institute for Social Science Research, 1965. 243 pp.

Similar to his two volumes on Financing the Public Schools (items 361, 362) this is also a thorough study, with a conclusion advocating tax credits as an aid to maintaining diversity and freedom of choice.

568. HANSEN, W. Lee and Burton A. WEISBROD. Benefits, Costs, and Finance of Public Higher Education. Chicago: Markham Publishing Co., Fall 1969. 115 pp. $3.95.

"Illuminates the range of problems associated with the determination of costs and benefits of higher education and explores alternative proposals for paying the costs. The book focuses on financial planning for higher education in California, but the findings are equally relevant for every state firmly committed to providing access to college for substantial numbers of its citizens. The authors also discuss the relationship between financial planning and legislative policy, the distinction between equity and economic efficiency, and questions which suggest needs for future research." (advt.)

569. CHAMBERS, M. M. Higher Education: Who Pays? Who Gains?: Financing Education Beyond the High School. Danville, Ill.: Interstate Printers, 1968. 302 pp.

570. BUCHANAN, James M. and Nicos E. DEVLETOGLOU. Academia in Anarchy: An Economic Diagnosis. N.Y.: Basic Books, 1970. 187 pp.

571. College Entrance Examination Board. Financing Equal Opportunity in Higher Education. A College Scholarship Service Colloquium Held at Scottsdale, Arizona, November 1969. N.Y.: CEEB, 1970. 44 pp. $1.00.

Eight articles concerning topics such as the federal government and student financial aid, student reactions to aid policies, the average-income student, Chicanos, black students, and disadvantaged students in private universities.

572. "Learn Now, Pay Later," The New Republic, February 20, 1971, pp. 12-13.

A brief report on the Pay as You Earn (PAYE) plan proposed by Yale University, which might alleviate the financial problems of higher education by removing much of the cost burden from taxpayers and placing it on the beneficiaries. Any student would be able to borrow money, and repayment would be over a period of about 35 years at an amount dependent on the level of income; thus, students in high-paying fields of work would repay more than they borrowed, while those making less would repay less. If the Yale pilot idea is successful, the scheme may be tried nationally, with a resource bank similar to FHA, and loan repayments incorporated in federal income tax and payroll withholding. The State of Ohio is also considering a similar scheme.

(cont'd)

The genesis of the Yale plan is not known; however, the idea has appeared in at least three recent instances (see following items).

The PAYE plan is intended to promote equality of opportunity, similar to voucher proposals for elementary and secondary education. (see items 352-354)

573. PLATT, William J. and Janet ABRAMS. A Self-Financing Fund for Student Charges in Higher Education. Menlo Park: Stanford Research Institute, Educational Policy Research Center, Research Note EPRC-6747-7, October 1968. 22 pp.

"A purpose of this paper is to outline a proposal for a student aid portion of financing higher education. This proposal is for a federally administered, self-financing fund for reimbursing tuitions and fees. It would be supported by an earmarked surcharge on the federal income tax . . . to be levied on the beneficiaries of higher education . . . The surcharge on the income tax would be graduated upward with years of post-secondary attainment of the taxpayer . . . The progressive nature of the income tax would assure that the amount an individual paid into the fund would be adjusted to his ability to pay."

574. TOBIN, James and Leonard ROSS, "A National Youth Endowment: Paying for the High Costs of Education," The New Republic, May 3, 1969, pp. 18-21.

"At present, the vast majority of post-high school vocational students must pay their way without any form of government assistance . . . (compounding) the inherited inequalities with which our young people grow up." (p. 19) The authors propose a line of credit or "endowment" available for every young man and woman between the ages of 18 and 28, to be applied to any form of post-secondary education. Rather than have student choices affected by the availability of funding in certain programs, such a program "would leave the choice of schooling entirely up to the student." Repayment would be over the individual's lifetime, and, like Social Security, the Youth Endowment would eventually be self-financing.

575. CLURMAN, Michael, "How Shall We Finance Higher Education?", The Public Interest, No. 19, Spring 1970, pp. 98-110.

Concludes that "In order to create a more desirable set of student attitudes, then, we must encourage students to pay the bulk of the direct costs of their education out of their future incomes and make the prosperity and survival of colleges and universities directly dependent on their ability to attract students in open competition in a free market."

576. KRISTOL, Irving, "A Different Way to Restructure the University," The New York Times Magazine, December 8, 1969.

A prominent social critic proposes that universities be financed by public grants to students, rather than institutions.

577. FEIN, Rashi and Gerald WEBER. Financing Medical Education: An Analysis of Alternative Policies and Mechanisms. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, January 1971. 295 pp. $6.95.

578 PETERSON, P. G. Foundations: Private Giving and Public Policy. Chicago: University of Chicago Press, January 1971.

579. CONNERY, Robert H. (ed.). The Corporation and the Campus: Corporate Support of Higher Education in the 1970's. Proceedings of the Academy of Political Science, XXX:1. N.Y.: Columbia University, APS (413 Fayerweather Hall), 1970. 187 pp.

The result of a November 1969 conference jointly sponsored by APS and the Council for Financial Aid to Education, bringing together educational leaders, corporation executives, and minority group spokesmen. 17 articles resulted, grouped under three headings: Challenges of the 1970's, Financing Higher Education, and the Corporate Viewpoint. In a summary chapter by Roger M. Blough, it is concluded that "Although voluntary support will likely increase in absolute dollars during the next decade, it will probably decline as a percent of the income for higher education." (p. 184)

580. FROOMKIN, Joseph. Aspirations, Enrollments, and Resources: The Challenge to Higher Education in the Seventies. Washington: U.S. Office of Education, OE-50058, 1970. 151 pp. $1.25.

"This study attempts to estimate the federal resources required to fulfill the aspirations of Americans for post-secondary education. It draws up two possible levels of support for 1976: one just to meet the minimum aspirations of the Nation, $1.8 billion for student support, with possibly another $2.0 billion for institutional support; and another budget which is more likely to allow the poor to participate in post-secondary education . . . $3.5 billion for student support, plus $4.5 billion in institutional aid." (p. 1) The aspirations of post college-age adults are not considered here.

581. U.S. Office of Education. Students and Buildings: An Analysis of Selected Federal Programs for Higher Education. Washington: USOE, Office of Program Planning and Evaluation, Planning Paper 68-2, May 1968. 72 pp.

Discusses undergraduate and graduate student aid, aid for facilities construction, and growth of higher education. Projections of requirements for major higher education aid programs are made to 1972-73.

I. Miscellaneous

582. WARD, Richard F. and Theodore E. KURZ. The Commuting Student. Detroit: Wayne State University, Commuter Centers Project, 1969.

A pioneering study, advocating campus outposts, academic "town houses," campus streets, more grassy areas, etc., to satisfy the needs of non-residential urban students.

583. TANCK, James. College Volunteers. A Guide to Action: Helping Students to Help Others. Washington: National Program for Voluntary Action, n.d. (1969?). 73 pp. (Available from USGPO, 40 cents)

Although a manual "written mainly for the school that has no volunteers, or that has only the bare beginnings of a program," there are important policy implications in supporting a comprehensive volunteer program, not only as a device to channel student enthusiasms into constructive pursuits, but as an important supplement to education at lower levels and a bridge to the community. The number of college volunteers is growing at a very rapid rate, and the Gallup organization is cited for their finding that 71% of students would consider working as part-time volunteers.

584. National Research Council. The Invisible University: Postdoctoral Education in the United States. Washington: National Academy of Sciences, 1969. 310 pp.

A thorough overview of the extent and nature of postdoctoral activity, with chapters devoted to an historical view; demography; implications for the postdoctoral, academic institutions, and nonacademic institutions; the foreign postdoctoral; finances; and conclusions and recommendations. Based on a census questionnaire, it is estimated that, as of 1967, there were 16,000 postdoctorals, largely in the natural and medical sciences, and largely concentrated in a few elite institutions. About half are foreigners.

585. WALTON, Sidney F., Jr., "Seven Proposals for Black-Directed Change," College Board Review, No. 71, Spring 1969, pp. 18-21.

Part of special section on "The black agenda for higher education" advocates ending the use of the term "Negro," employing more minority persons, developing "community counselor" positions to serve as linkage between school staff and minority communities, a credential major and minor in Afro-American studies, issuing credentials to persons with A.A. degrees, recruiting minority teachers with A.A. degrees, and a four-period or less teaching day that allows meaningful in-service training.

586. WRIGHT, Nathan, Jr. What Black Educators are Saying. N.Y.: Hawthorn, Spring 1970.

587. SPURR, Stephen H. Academic Degree Structures: Innovative Approaches. Principles of Reform in Degree Structures in the United States. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, 1970. 213 pp. $5.95.

Advocates a reduction of the 1600 different degree titles presently used to about 60, along with a consistent nomenclature for six higher education levels: associate, bachelor, master, intermediate graduate, doctoral and post-doctoral. By giving an associate's degree or certificate after the sophomore year in four-year colleges, the A.A. would no longer be considered a second-rate degree and fewer students would be considered as college dropouts.

588. HECKMAN, Dale M. and Warren Bryan MARTIN. Inventory of Current Research on Higher Education 1968. N.Y.: McGraw-Hill, December 1968.

A joint project of the Carnegie Commission on the Future of Higher Education and the Center for Research and Development in Higher Education at UC, Berkeley, the inventory lists more than 900 items of projects completed in 1966-68 and research continuing into 1969. Many of these projects consider trends and futures. 220 of these projects are briefly described in The Chronicle of Higher Education, November 25 and December 9, 1968.

589. WALTON, Stephen. No Transfer. N.Y.: Vanguard, 1967. 236 pp.

A novel describing a futuristic Modern University: a skyscraper ivory tower where those with unsatisfactory records are publicly guillotined.

IV. Other Educating Institutions

A. Pre-School

590. HUNT, J. McVicker. The Challenge of Incompetence and Poverty. Urbana: University of Illinois Press, 1969. 290 pp. $9.50; $3.45 paper.

"The role of early education and new conceptions of intelligence in breaking the poverty-incompetence cycle, 'perhaps within a single generation'." (advt.)

591. ROBISON, Helen F. and Bernard SPODEK. New Directions in the Kindergarten. Early Childhood Education Series. N.Y.: Teacher's College Press, 1965. 214 pp. $3.25 paper.

Proposes intellectual content appropriate for today's children, including a way of defining goals that will enable kindergarten teachers "to cultivate the roots of learning that will be significant to the entire life of an individual learner . . . too few children are being

(cont'd)

prepared to cope with an increasingly technical and complex society." (pp. vi, 1)

592. PINES, Maya. Revolution in Learning: The Years from Birth to Six. N.Y.: Harper and Row, 1967. 244 pp.

A journalistic overview assessing current developments in "pre-school" education. There is little focus on trends per se, and no mention of the future--but this is a good statement on an area of critical importance to the future of education, with implications of higher student input quality and perhaps a re-definition of "school" insofar as clientele served.

593. PINES, Maya, "Why Some 3-Year-Olds Get A's--And Some Get C's," The New York Times Magazine, July 6, 1969.

An overview of recent research in the emerging field of the "growth sciences." One social scientists predicts that "Within 30 to 50 years . . . the kind of child who is rated outstanding today will be considered merely normal, as a result of more skillful child-rearing." Another researcher suggests that teachers should take on a new role of training parents and involving the entire family in preschool education. It is concluded that the years from birth to 3 may soon become "a target of first priority."

594. MONTESSORI, Maria. The Child in the Family. Trans. by Nancy Cirillo. Chicago: Regnery, 1970. 120 pp.

A summation of Dr. Montessori's thinking on early childhood. First published in Italian in 1956. There are many books by and about the Montessori Method and Montessori schools--this one is not necessarily the best.

B. Adult and Continuing Education

595. BLAKELY, R. J. Toward a Homeodynamic Society. Boston: Center for the Study of Liberal Education for Adults, 1965. 54 pp. $1.50. (Notes and Essays on Education for Adults, no. 49)

"This essay is an attempt to answer two big questions: 'What are the important social trends? What are their implications for education?' . . . The major trend of the present age is to increase knowledge and power. The major problem is the widening gap between knowledge and power and our ability to control them. The major implication is that our learning to control knowledge and power must overtake our learning to increase knowledge and power." (p. iii) In going on to advocate the homeodynamic, inventive society, Blakely distinguishes between three types of learning (hereditary-cultural, adaptive cultural, and inventive-cultural), and the necessary learning for the adult as parent, citizen, and worker. RECOMMENDED

596. DUMAZEDIER, Joffre. Toward a Society of Leisure. Translated from the French by Stewart E. McClure. Foreword by David Riesman. N.Y.: The Free Press, 1967. 307 pp. (Originally published in 1962)

"Dumazedier believes that leisure is intricately related to the largest questions of work, family life, society, and politics. Basing his conclusions on empirical studies, he provides a rigorous analysis of leisure as it is manifested in recreation, relaxation, and self-improvement. He surveys the implications of a mass market for tourism, sports, movies, television, and education, noting the evidence of a burgeoning popular culture which tradition-oriented social critics have been reluctant to recognize. In addition, the author argues for further intensive study of leisure and for constructive planning in this area. He believes that if the age of material abundance is not to lead to a decline of artistic and intellectual achievement, society must devote as much attention to its cultural development as it does to economic and social problems." (book jacket)

597. ZIEGLER, Warren L. (ed.). Essays on the Future of Continuing Education Worldwide. Syracuse: Syracuse University Publications in Continuing Education, SU Press, July 1970. 141 pp. $3.00.

Eight articles discussing trends in adult education and methods of thinking about and planning for the future.

598. MOSES, Stanley. The Learning Force: An Approach to the Politics of Education. Prepared for the U.S. Office of Education by the Educational Policy Research Center. Syracuse: EPRC, March 1970. 40 pp.

The Learning Force includes all students in Core institutions (elementary, secondary, and higher education) as well as those in the Periphery (corporation and military training programs, proprietary schools, anti-poverty programs, correspondence schools, formal courses conducted over educational television, and other adult education programs conducted by Core institutions, museums, libraries, unions, etc.). Moses supplies trend data (1940-1975) indicating that enrollments in the Periphery (assessed on a head count rather than an FTE basis) are growing at a rapid rate and will be about 25% greater than Core enrollments by 1975. It is concluded that "Activities in the Periphery provide the basis for developing a new framework for the considerations of educational policy. A consideration of the total Learning Force provides the basis for making an accurate assessment of the true dimensions of education in American society, not only regarding enrollments . . . but also total educational expenditures and employment. A consideration of the total learning force also provides the basis for making more rational decisions regarding policy for the Core as well as providing the basis for new initiatives in the Periphery." (p. 37) RECOMMENDED

599. TOUGH, Allen. The Adult's Learning Projects: A Fresh Approach to Theory and Practice in Adult Learning. Toronto: Ontario Institute for Studies in Education, July 1971. Approx. 210 pp. and $7.00 (U.S. and Canadian).

The latest and most sophisticated of a series of studies conducted by Tough and his associates on self-initiated learning behavior. A "learning project" is a series of "learning episodes" totalling more than 7 hours, an episode being defined as an effort "in which more than one half of a person's motivation is to gain and retain certain knowledge and skill that is fairly clear and definite."

Among 66 adults, the in-depth interviews discovered that 65 had conducted at least one learning project in the past year, with an average of 8 distinct projects totalling 700 hours a year of learning effort. Less than 1% of these projects were motivated by academic credit, and about 70% of the projects were planned by the learner himself. Ten 16-year olds and ten 10-year olds were also interviewed, with a parallel discovery of significant non-school learning activity.

Despite the small data base, Tough raises a number of fundamental questions for further research and for educational policy directed toward learners of all ages. Four clusters of suggestions are offered for making schools and colleges more useful in the light of observed learning behavior: producing graduates who are willing and able to set appropriate learning goals, providing students with a greater choice of how to learn, freeing the student to choose a larger proportion of subject matter that he wants to learn, and decreasing the emphasis on credit as a motivation for learning. For adults, recommendations are made for better help and resources with both planning and actual learning, and for new ways of helping people become more competent as learners. RECOMMENDED

600. CLARK, Burton R. Adult Education in Transition: A Study of Institutional Insecurity. Berkeley: University of California Press, Third Printing, 1968. 202 pp.

No information is provided on the first and second printing, but the field work for this sociological study of educational administration was conducted in the Los Angeles school system in the 1952-1953 period. The final chapter discusses "Implications for Theory and Policy" for public school adult education programs.

601. WHIPPLE, J. B. and D. S. CHERTOW (eds.). The University and Community Service: Perspectives for the Seventies. Syracuse: Syracuse University Continuing Education Series, May 1970. $3.00 paper.

602. WHIPPLE, James B. and Gary A. WODITSCH (eds.). Oakland Papers: Symposium on Social Change and Educational Continuity. Brookline, Mass.: Center for the Study of Liberal Education for Adults at Boston University, 1966. 75 pp.

Presented at Continuing University Symposium Series, Oakland University, Rochester, Mich. Papers by Peter F. Drucker, Max Lerner, Rollo May, and Margaret Mead.

603. JESSUP, F. W. (ed.). Lifelong Learning: A Symposium on Continuing Education. Oxford, Eng.: Pergamon Press, 1969. 178 pp.

604. GOLDMAN, Freda. A Turning to Take Next: Alternative Goals in the Education of Women. Boston: Boston University Center for the Study of Liberal Education for Adults, 1965.

605. LIVERIGHT, A. A., "Continuing Education and Basic Economic Security" in Robert THEOBALD (ed.), Committed Spending: A Route to Economic Security. N.Y.: Doubleday, 1968; Anchor Books, 1969, pp. 145-172.

After discussing signs of progress toward lifelong learning and obstacles to the acceptance of The Learning Society, the late A. A. Liveright proposes a plan for lifelong learning and community service including the following essential ingredients: a national program based on new kinds of goals and incentives, new programs built upon the needs and aspirations of the underprivileged, basic changes in formal education that will inculcate the desire and skills for lifelong learning in future adults, a broader responsibility for continuing education of a college's graduates, new kinds of volunteer tasks and positions, and a new institutional form: a comprehensive "Uncommon School" or College in every major community which is planned, developed, housed, operated, and staffed primarily for the purpose of adult and continuing education, serving "as the hub not only for independent liberal education and studies but also . . . the focus in the community for health, family development, recreation, and self-fulfillment programs." (p. 166) RECOMMENDED

606. LIVERIGHT, A. A. A Study of Adult Education in the United States. Boston: Boston University Center for the Study of Liberal Education for Adults, 1968. 138 pp. $2.00.

Although not primarily aimed at trends or futures, both are considered somewhat in this authoritative overview, which forecasts that "Even if nothing further is done to stimulate participation, adults involved in continuing education will triple in number within the next twenty years." (p. 13) Some of the trends noted include an upgrading image (from "remedial" to "lifelong learning"), more courses specifically for adults, more non-credit courses, credit for experience, and new degree programs.

607. ALFORD, Harold J. Continuing Education in Action: Residential Centers for Lifelong Learning. N.Y.: Wiley, 1968.

"Sketches the origins of adult education and focuses on the planning required for continuing education facilities and programming." (The Chronicle of Higher Education, October 28, 1968)

608. College Entrance Examination Board. College-Level Examination Program: Description and Uses, 1968. Princeton, N.J.: CEEB, Publications Order Office (Box 592), 1968. 56 pp. Free.

"The College Board's College-Level Examination Program (CLEP) began in 1965 with the broad purpose of developing a national system of placement and credit by examination primarily directed to higher education. The Program has five major objectives: to provide a national program of examinations that can be used to evaluate nontraditional college-level education, specifically including independent study and correspondence work; to stimulate colleges and universities to become more aware of the need for and the possibilities and problems of credit by examination; to enable colleges and universities to develop appropriate procedures for the placement, accreditation, and admission of transfer students; to provide colleges and universities with a means by which to evaluate their programs and their students' achievenent; to assist adults who wish to continue their education in order to meet licensing requirements or qualify for higher education." (p. 3)

This important development, utilizing five General Examinations, and, ultimately, more than 100 Subject Examinations, is already employed by several hundred colleges and universities. It may well prove to be an "Alternative Future for Learning" of major proportions, affecting higher education to a degree perhaps even greater than CEEB's College Board Examinations affect the behavior of high school juniors and seniors.

609. The Open University: Prospectus 1971. Buckinghamshire, England: The Open University (Walton, BLETCHLEY, Bucks.), November 1969. 112 pp. (More recent documents by and about the University are undoubtedly available.)

Beginning operations in January 1971, the Open University is a totally new concept that promises to have a major impact on higher education not only in Britain but worldwide.

Generally admitting students 21 and over, no formal academic qualifications are required for entrance, and only failure to progress adequately is a bar to continuation of studies. The B.A. degree is initially available, but the University also plans to offer the B.Phil., M.Phil., and Ph.D.

A general liberal arts curriculum is offered, and students work at home at their own time and pace, utilizing correspondence "packages," TV and radio programs, the services of 3000 part-time tutors and counselors at 250 local study centers located throughout the nation, and intensive one-week summer school study periods. Costs promise to be substantially lower than conventional campus-based higher education, and the initial enrollment of 25,000 represents an immediate 40% increase in the number of students entering Britain's universities.

610. MACLURE, Stuart, "England's Open University: Revolution at Milton Keynes," Change: The Magazine of Higher Education, 3:2, March/April 1971, pp. 62-68.

An excellent survey by the editor of The Times Educational Supplement in London, of the history, present operations, and prospects of the Open University. The enrollment could be more than 100,000 in 5-6 years, but the dropout rate is expected to be high. "A graduation rate of 20% will represent a remarkable degree of success"; the actual figure might be less than 5%. Another difficulty is that, despite the enthusiasm for making higher education available to the working class, the vast majority of the initial applications were from the middle class, 40% alone from teachers. Nevertheless, "the Open University offers the prospect of a breakthrough in educational technology--not just the hardware but the planning and coordination of different techniques. It is bound to have a revolutionary impact on existing methods in higher education." (p. 68) Americans take note. RECOMMENDED

611. BIENVENU, Bernard J. New Priorities in Training: A Guide for Industry. N.Y.: American Management Association, 1969. 207 pp. $10.50.

Argues that the bewildering rate of change demands that training become a continuous process, whereas at the present time, nine out of ten employee training programs are sporadic affairs. Advocates a "total training" process.

612. RIESSMAN, Frank, Sumner M. ROSEN, Joseph FEATHERSTONE, and Alan GARTNER. Essays on New Careers: Social Implications for Adult Educators. Syracuse: Syracuse University Publications in Continuing Education, Notes and Essays on Education for Adults No. 65, July 1970. 82 pp. $2.50.

613. U.S. Department of Labor, Manpower Administration. Toward the Ideal Journeyman. Vol. I. An Optimum Training System in Apprenticeable Occupations. Washington: USGPO, 1970. 24 pp. $.25.

A summary monograph based on a two-volume study of apprenticeship by Alfred S. Drew (Educational and Training Adjustments in Selected Apprenticeable Trades), and outlining an optimal system of training for all trades that "would produce the 'ideal journeyman,' skilled in today's technology and adaptable to the technology of tomorrow." To overcome the important problem of skill obsolescence, "The report recommends that the trades develop a coordinated approach for identifying new developments and forecasting changes requiring modifications of trade training programs." (p. 15)

614. ANDERSON, Darrell and John A. NIEMI. Adult Education and the Disadvantaged Adult. Syracuse: Syracuse University Publications in Continuing Education and ERIC Clearinghouse on Adult Education, Occasional Papers No. 22, November 1970. 96 pp. Bib. pp. 71-96. $1.50. (cont'd)

A review of the adult education literature to determine the role of education in altering the personal and social characteristics of disadvantaged adults, concluding that "Any plan for a remedy for disadvantage must be concerned with cultural change which involves an alteration in the over-all way of life. Piecemeal approaches directed toward the alleviation of individual distress will not solve the problem because they will not alter the basic cultural environment . . . Thus, it may be more economical in the long run to establish new programs unrelated to present educational institutions than to attempt to reconstruct existing systems."

The bibliography of 317 items is alphabetical and unannotated.

615. U.S. Office of Education, Adult Education Branch. A Comprehensive Plan for Solution of the Functionally Illiterate Problem. A Report on the Present: A Plan for the Future. Prepared by Management Technology, Inc. Washington: March 1968. 46 pp.

Plans an Adult Basic Education program for the EDP (Educationally Disadvantaged Population) of at least 24 million people, 18 and over, who have not completed eight years of school. Unfortunately, this definition of the "functionally illiterate" may not only be inaccurate, but increasingly obsolete as the minimum level for societal functioning continues to rise. The EDP Target Population is projected to the year 2008, without any consideration of changing definitions and needs.

616. MASTERS, William H. and Virginia E. JOHNSON. Human Sexual Inadequacy. Boston: Little, Brown & Co., 1970. 467 pp. $12.50.

Based on thorough research, proposes a program of sex education for adults conducted by therapeutic teams, to dissipate misconception, misinformation, and taboo. (Although obviously an area of learning which is outside the traditionally defined realms of "education," sex education for adults is nevertheless an emerging learning need in a society that is increasingly aware of sexual dysfunction. Indeed, this program may be necessitated as a corrective to educational practices of home and school.)

C. Religious Education

617. WESTERHOFF, John H. III. Values for Tomorrow's Children: An Alternative Future for Education in the Church. Pilgrim Press, 1970. 128 pp. $4.95.

Addresses Protestant Christianity with a call for more vital concepts of church education.

618. McCLUSKEY, Neil G., S.J. Catholic Education Faces its Future. Foreword by Theodore M. Hesburgh, C.S.C. Garden City: Doubleday, 1969. 311 pp. $5.95.

A leading authority confronts a wide array of issues at every level of Catholic education. A vital role is still seen for the Catholic school, although "It is not impossible that by the 1990's both the present public-school system and the Catholic system will be replaced by one comprehensive school system, publicly supported, within which the educational objectives of the religious groups can also be realized." (p. 289)

619. "The Future of Catholic Education in America." Special Issue of The Notre Dame Journal of Education, 2:1, Spring 1971.

620. KOOB, C. Albert and Russell SHAW. S.O.S. for Catholic Schools: A Strategy for Future Service to Church and Nation. N.Y.: Holt, Rinehart, and Winston, 1970. $4.95.

Discusses the present situation and possible future state of Catholic education.

621. BROWN, W. E. and Andrew GREELEY. Can Catholic Schools Survive? N.Y.: Sheed, September 1970.

622. GREELEY, Andrew M. The Changing Catholic College. NORC Monographs in Social Research, No. 13. Chicago: Aldine, 1968. 256 pp. $7.50.

D. Libraries, Print Media, and Museums

623. MEISE, Norman R. Conceptual Design of an Automated National Library System. Metuchen, N.J.: Scarecrow Press, 1969. 234 pp.

Demonstrates the feasibility of an automated system that utilizes existing technology. Also discusses bibliographic search, acquisitions, circulation data, cataloging, and tying together local libraries (public, academic, and special), regional centers, and a National Library Central (perhaps the Library of Congress, which is already moving toward automation). Although this volume is largely technical, it is nevertheless important for suggesting what would more or less appear to be the inevitable shape of future information systems.

624. Educational Facilities Laboratories. The Impact of Technology on the Library Building. N.Y.: EFL, 1967. 20 pp.

A brief and competent summary of expert opinion concerning the impact of computers, microforms, and facsimile transmission on college library buildings.

625. REYNOLDS, John Donald. The Future of Library Buildings: A Feasibility Study. London: Library Associates, 1968.

626. HORN, Francis H. The Future of the Library in Higher Education. Carbondale: Southern Illinois University Library, 1958. 21 pp.

627. SCHICK, Frank L. (ed.). The Future of Library Service: Demographic Aspects and Implications. Urbana: University of Illinois, 1961. 286 pp.

A worthwhile collection of essays, discussion trends and possible futures for eleven types of libraries and six services within libraries.

628. VOIGT, Melvin J. (ed.). Advances in Librarianship. Vol. I. N.Y.: Academic Press, 1970. 296 pp. $15.00.

629. "World of Libraries: Past, Present, Future." Wilson Library Bulletin, 43: February 1969.

630. CLAPP, Verner Warren. The Future of the Research Library. Urbana: University of Illinois Press, 1964. 114 pp.

The Windsor Lectures in Librarianship. Of interest only to specialists.

631. LICKLIDER, J.C.R. Libraries of the Future. Cambridge: MIT Press, 1965. 219 pp.

Technical discussion.

632. HORNE, David, "The Changing World of Scholarly Books," Publisher's Weekly, July 17, 1967.

An authoritative short-range forecast by the Assistant Director of Harvard University Press. More books are foreseen involving syntheses and interdisciplinary approaches, concerned with current problems, and written by "shapers of ideas, of sensibility, of taste, of values." This shift in scholarly publishing may be a good indicator of future shifts in research foci and college curricula.

633. ESCARPIT, Robert. The Book Revolution. London: UNESCO and George G. Harrap, 1966. 160 pp.

634. BOOHER, Edward E., "Not Whether But How the Book Will Survive," Publisher's Weekly, June 9, 1969.

A forecast of the book industry to 1977.

635. ASHEIM, Lester (ed.). The Future of the Book: Implications of the Newer Developments in Communications. Chicago: University of Chicago, Graduate Library School, 1955. 105 pp.

Ten papers presented at the 20th Annual Conference of the Graduate Library School. Especially see "New Problems in Plotting the Future of the Book" by Asheim.

636. BAKER, Dale B., "Communication or Chaos?", Science, 169: August 21, 1970, pp. 739-742.

The Director of Chemical Abstracts Service discusses information systems, the growing interdisciplinary nature of knowledge, and the "tremendous educational task" of making scientists, both young and old, aware of the power of the new information tools now becoming available and capable of using them effectively. Baker concludes that "the greatest challenge facing us in the 1970's is the coordination of the individual information systems into an effective information network for science and technology . . . a natural and necessary consequence of the integration of science itself."

637. "UMF and the Future," Saturday Review, April 19, 1969, p. 26.

An important editorial on the possible impacts of Ultramicrofiche (UMF), a new device "as far beyond microfilm as the microscope is beyond the magnifying glass." By representing 2,000 pages on a transparency smaller than a book page, "UMF will revolutionize the physical form of the library . . . (and) new libraries can be built at a fraction of the cost of present designs."

638. TEBBEL, John, "Libraries in Miniature: A New Era Begins," Saturday Review, January 9, 1971, pp. 41-42.

A brief overview discussing the Microbook Library of Encyclopaedia Brittannica, the PCMI Library Information System of the National Cash Register Co. (utilizing UMF, or Ultramicrofiche), The New York Times' Information Bank, a new index from University Microfilms, and possible applications of cassette video players to books. "We are approaching a new era that will certainly revolutionize libraries, probably reading habits, and possibly even publishing itself . . . What the transistor is to radio and television, high reduction photography is to the printed page." RECOMMENDED

639. WITTLIN, Alma S. Museums: In Search of a Usable Future. Cambridge: MIT Press, 1971. $15.00.

640. HARRISON, Molly. Changing Museums. N.Y.: Humanities Press, 1968. 110 pp. $2.25 paper.

E. Electronic Media

641. ASIMOV, Isaac, "The Fourth Revolution," Saturday Review, October 24, 1970, pp. 17-20. (Part of special issue entitled "Toward The Global Village")

One of America's most prolific writers on science fiction and non-fiction topics, Asimov views the evolution of human communications in terms of four revolutions: speech, writing, the printing press, and

(cont'd)

electronic communications. We have advanced as far as we can in the world of the third revolution, and "The race is on between the coming of the true fourth revolution and the death of civilization that will otherwise inevitably occur through growth past the limits of the third." (p. 18) Although the first signs of the coming of the fourth revolution were to be noted in the mid-nineteenth century, this revolution is still "limited in scope and powerless to cause anything but fringe effects." Once truly established, however, Asimov envisions a worldwide electronic literacy, person-to-person communication on a scale of massive freedom, the library of mankind available to any man at any time, a personal immediacy that will justify the sense of a global village, lessened differences among men, English as the lingua franca, an "enormous" revolution in education with much learning in the home, uneducated peoples of the world leapfrogging into the culture of the fourth revolution, and cities spreading out and disappearing (thus alleviating the overconcentration which many times multiplies the impact of overpopulation).

642. GATTEGNO, Caleb. Towards a Visual Culture: Educating Through Television. N.Y.: Outerbridge & Dienstfrey, 1969. 117 pp. $4.95.

A serious essay of McLuhanesque proportions on the potentials of television in education: "a call to use television for what it can give, which is really tremendous and by most still unsuspected." (p. 4) " . . . only recently, through television, has (man) been able to shift from the clumsiness of speech . . . to the power of the dynamic, infinite visual expression . . . we can foresee the coming of an era where . . . we shall be able to share vast conscious experiences at once . . . The future is requiring that we learn to consider ever larger wholes in whatever social position we find ourselves . . . a visual culture is the answer to such a trend . . . sight is a far swifter means of experiencing and communicating than speech." (p. 5)

643. YOUNGBLOOD, Gene. Expanded Cinema. With an Introduction by R. Buckminster Fuller. N.Y.: Dutton, 1970. 432 pp. $4.95 paper.

Argues that similar to the definition of man coming to mean man/plant/machine, the definition of cinema must also be expanded to include videotronics, computer science, and atomic light. Contents include radical evolution and future shock in the paleocybernetic age, the intermedia network as nature, global closed circuits,the earth as software, synaesthetics and kinaesthetics: the way of all experience, 2001: the new nostalgia, the technosphere, man/machine symbiosis, cybernetic cinema, computerfilms, the videosphere, etc.

644. McLUHAN, Marshall. Understanding Media; The Extensions of Man. N.Y.: McGraw-Hill, 1964. 365 pp.

A much-discussed pot-pourri of ideas on past, present, and future. Subject to selective perception, in order to promulgate the view that "the medium is the message," and to considerable over-simplification,

in order to classify media as hot or cool. Nevertheless, quite valuable if read selectively, especially for the major theme describing a transition from a linear and mechanical society of specialization to an electric society of concurrence and wholeness. Especially see the final chapter, "Automation: Learning a Living." (pp. 349-359)

645. BAGDIKIAN, Ben H. The Information Machines: Their Impact on Men and the Media. N.Y.: Harper & Row, February 1971. 359 pp. $8.95.

The Assistant Managing Editor of The Washington Post, after two years at RAND, offers a broad overview on the collecting and daily delivery of information, largely through newspapers, television, and radio, and how our lives may be changed by the way we get our news in the future. The long-range significance of the primary new medium, cable television, is seen as its potential for outward communication. Concludes with the results of a 44-item Delphi exercise. RECOMMENDED

646. HELLMAN, Hal. Communications in the World of the Future. N.Y.: M. Evans (distributed by Lippencott), 1970. About 180 pp. $4.95.

647. Law and Contemporary Problems, 34:2, Spring 1969 and 34:3, Summer 1969.

Two special issues on communications, including articles such as "Communications Technology--A Forecast of Change," "On the Impact of the New Communications Media upon Social Values," "International Communications: What Shape to Come?", etc.

648. GANS, Herbert J., "The Mass Media as an Educational Institution," Center for Urban Education, The Urban Review, 2:1, February 1967.

A challenging discussion of policy implications based on the premise that "both the school and the mass media are, in the broadest sense, political institutions competing for cultural power in the society." Because of "the media's demonstrated ability at engaging a child's interest and holding his attention more adequately than the school," it is suggested that "perhaps school learning should not be a compulsory process" and the school should become more audience-oriented. "The school's conception of the child, which developed in an era in which there was no democracy or equality for children . . . needs to be replaced." The conception of the teacher as a professional with a monopoly of knowledge "is no longer applicable in an era when the mass media have informed both children and parents." RECOMMENDED

649. ROSSI, Peter H. and Bruce J. BIDDLE (eds.). The New Media and Education: Their Impact on Society. Chicago, Aldine, 1966; Garden City, N.Y.: Doubleday Anchor, 1967. 460 pp.

Eleven articles by sociologists on recent and projected technological developments, and the impact of the new media on school systems, higher education, adult education, and the total society.

650. International Institute of Educational Planning. The New Media: Memo to Educational Planners. Paris: IIEP, 1967. 175 pp.

Based on a research project directed by Wilbur Schramm.

651. GEYELIN, Philip L. and Douglass CATER. American Media: Adequate or Not? Washington: American Enterprise Institute for Public Policy Research (1200 17th St.), 1971. $5.75.

Part of the Rational Debate Seminars, containing views of the two spokesmen, their rebuttals, and their discussions with a seminar of informed experts, including the press.

652. U.S. Office of Education. Educational Television: The Next Ten Years. FS 5.234:34036. Washington: GPO, 1965. 375 pp.

653. KOENIG, Allen E. and Ruane B. HILL (eds.). The Farther Vision: Educational Television Today. Madison: University of Wisconsin Press, 1969. 387 pp.

21 articles, including 2 on the future of ETV.

654. Carnegie Commission on Educational Television. Public Television: A Program for Action. N.Y.: Harper & Row, 1967; Bantam Books, 1967. 254 pp.

Advocates a significant expansion of public television.

655. JOHNSON, Leland L. The Future of Cable Television: Some Problems of Federal Regulation. Santa Monica: The RAND Corporation, 1970. 90 pp. $3.00 paper.

656. TOBIN, Richard L. (ed.), "The Coming Age of News Monopoly," Saturday Review, Communications Supplement (Tenth Anniversary Issue), October 10, 1970, pp. 51-65.

Four articles discussing aspects of "an era in which more than 95% of all the daily newspapers in the United States will have no local print competition, where only two national newsgathering organizations will supply virtually everything broadcast over the average radio or TV station . . ." Especially see Fred W. Friendly's cautions about the impact of cable TV in "the wired city."

657. MICKELSON, Sig, "The First Eight Years," Saturday Review, October 24, 1970, pp. 21-23. (Part of special issue entitled "Toward The Global Village")

An overview of developments in communications satellites, and the growing linkages between the developed and the developing world. While circuit capacity has vastly increased, cost continues to be lowered so that by 1975 it may be 25% of the 1968 figure. Direct-to-home communications through broadcast satellites may be technically feasible by the late 1970's.

658. The Twentieth Century Fund Task Force. The Future of Satellite Communications. N.Y.: Twentieth Century Fund (41 East 70th Street), 1970. $1.00.

"A committee of distinguished authorities . . . explodes the myth of communications satellite resource scarcity . . . finds unjustified the fear of propaganda and cultural imperialism . . . recommends new and simplified controls over satellite communications." (advt.)

659. ALPERT, Hollis, "The Cassette Man Cometh"; Ivan BERGER, "Someday Morning for the Culture Cans," Saturday Review, January 30, 1971, pp. 42-47.

Recent articles on the impending Cassette TV revolution, with the Berger article providing a chart of eleven competing systems, their expected dates of introduction in 1971 and 1972, and their technical attributes. Also see feature articles in Life (October 16, 1970, pp. 47-52), The New York Times (Sunday, July 5, 1970, Sec. 3, p. 1), and Saturday Review (August 8, 1970). Many other articles and books on cassettes will surely be published in the near future.

This new technology may prove to have a far greater impact on education than broadcast television, once the bewildered consumer makes a choice between Cartrivision, Videocassette, EVR, SelectaVision, Instavision, Videodisc, and other systems--all largely incompatible with each other. Ultimately we might see a national or global electronic university offering thousands of cassette courses that would make even the offerings of the multiversity appear meager.

660. TEBBEL, John, "Network Television's Uncertain Future," Saturday Review November 14, 1970, pp. 69-70.

A short essay on the possibility that "the communications industry may be plodding, like the dinosaur, toward extinction." Some data, depending on whose statistics one reads, suggest that television is actually losing its audience. Even more threatening are the prospects of cable television and cassettes. But Tebbel also suggests some possible negative consequences if network television does disappear, especially as concerns politics and binding the nation together. (For a more sanguine view of the TV networks, see Business Week, March 27, 1971, pp. 90-96)

V. Planning and Plans

A. Forecasting Methodology

661. GABOR, Dennis. Innovations: Scientific, Technological, and Social. N.Y.: Oxford University Press, March 1971. $4.95.

"Challenges the shallow assumptions, the obsolete commitments, and the automatic predictions of the fashionable 'futurologists' . . . This sensitive and finely balanced survey of human possibilities should

(cont'd)

release current thought about the future from its technocratic obsessions and bureaucratic compulsions." (Lewis Mumford in advt.)

662. GABOR, Dennis. Inventing the Future. London: Secker and Warburg, 1963; Penguin Books, 1964. 199 pp.

"The title of this book became the label of a world-wide movement of scientists and 'futurists' who maintained that the future ought to be chosen from many possible futures. Starting from the three great dangers which our civilization faces--nuclear war, overpopulation, and the Age of Leisure--a counter strategy is developed to mobilize man's ability not only to survive but to enjoy life . . . already considered to be a 'classic'." (Jantsch)

663. de JOUVENEL, Bertrand. The Art of Conjecture. Translated from the French by Nikita Lary. N.Y.: Basic Books, 1967. 307 pp. (First published by Editions du Rocher in 1964)

An authoritative discussion of "the customs of the mind in its commerce with the future," covering predictions, ways of conceiving the future, and quantitative predictions. The last chapter advocates "a surmising forum" as "a necessary response to a growing demand for forecasts." RECOMMENDED

664. POLAK, Fred L. The Image of the Future: Enlightening the Past, Orienting the Present, Forecasting the Future. Volume One (The Promised Land, Source of Living Culture, 456 pp.) and Volume Two (Iconoclasm of the Images of the Future, Demolition of Culture, 376 pp.). Leyden (The Netherlands): A. W. Sijthoff, 1961; N.Y.: Oceana, 1961. Translated from the Dut by Elise Boulding. (Abridged translation, also by Boulding, to be published by George Braziller in 1971.)

"Argues that all major systems of history that have been in vogue during the last few centuries are incomplete in their time concepts. Hegel, Spengler, Schubart, Toynbee, Sorokin . . . regard the time flow as consisting of past and present only . . . The possible or probable future is for a considerable part already visibly here today. It is foreshadowed by the people's chosen images of the future . . . A modern and progressive restatement of what has been called the 'prophetic' approach to history." (book jacket abstract)

665. JANTSCH, Erich. Technological Forecasting in Perspective. Paris: Organisation for Economic Co-Operation and Development (OECD), 1967. 401 pp.

Extensive discussion of a framework for technological forecasting and related techniques. Of even greater importance are the two annexes. Annex A lists "Technological Forecasting Activities in Non-Industrial Environments," including 17 forecasting institutes and consulting firms (13 American), military and national planning in various nations, and forerunner activities in look-out institutions (9 of 13 listed are

American). Annex B contains an annotated bibliography of about 420 items divided into 14 categories. Despite comprehensiveness in the area of scientific and technological forecasting, there is no mention of writings on educational futures or of organizations listed having such a concern. (For a more current listing of American futurists, see following item.)

666. McHALE, John. Typological Survey of Futures Research in the U.S. Binghamton: State University of New York, Center for Integrative Studies, June 1970. 103 pp. Mimeo.

A survey of the current state of futures research programs in the United States, conducted for the National Institute of Mental Health during the June 1969-June 1970 period, "in order to elicit a representative profile of such ongoing work, i.e., who is doing what, in which social sector, how it is being done and to which specific end(s)." (p. 1) Based on 135 usable returns (out of 356 letters sent out), McHale concludes that there are not more than 1000 full-time and less than 500 part-time workers in the field. (p. 19) Various charts and appendices list organizations, individuals, characteristics of the work, various definitions of futures research, communication needs, a discussion of the World Future Society, and informal change agencies that are actively creating alternative social arrangements. Although it is pointed out that this is not a directory or a social register of futurists, the study is nevertheless the best approximation for the time being.

Based on the returns (which undoubtedly characterize the mainstream), McHale concludes that the disciplines represented are heavily biased in the area of the physical sciences and engineering, which may tend "to push the overall developmental direction of the field towards 'professional respectability' and institutional propriety based on methodologies and models drawn from these areas . . . this direction if sustained may limit severely the 'look-out' and 'early-warning' capability of futures research." (p. 42) The age range concentration and sex ratio of the researchers also comes under criticism, and it is pointed out that "much of the work in this area is, indeed, tied closely to the traditional and largely unexamined premises for human action which are imbedded in our local ideological systems and value assumption. It is largely 'culture bound' in a period when one of the key aspects of ongoing change is the degree to which the more stereotyped socio-cultural premises . . . are undergoing considerable modification." (p. 43)

"One might conclude here that the potential contribution of futures research in the manifold service of the society is very great--but that present state of development, and the range of supported inquiry is not wholly conducive to the fullest use of that potential." (p. 45)
RECOMMENDED

667. WEAVER, W. Timothy. The Delphi Method. Syracuse: Educational Policy Research Center, Working Draft, June 1970. 160 pp. Mimeo.

A three-part report with an extensive analysis of the experimental research that has proceeded and accompanied the development of the Delphi method, and its use as a device for technological forecasting and educational forecasting. Many reservations are made, and it is concluded that "Although Delphi was originally intended as a forecasting tool, its more promising educational application seems to be in the following areas: (a) a method for studying the process of thinking about the future, (b) a pedagogical tool which forces people to think about the future, and (c) a planning tool which may aid in probing priorities held by members and constituencies of an organization." (Also see summary article by Weaver in Phi Delta Kappan, January 1971, pp. 267-271)

668. HELMER, Olaf. Social Technology. N.Y.: Basic Books, 1966. 108 pp.

Discussion of Delphi technique and presentation of results from 1964 RAND study. "Social technology" proposed as an intellectual discipline in its own right, enabling "regular and systematic exploration and collation of expert opinion on the future, so that latest findings can be available to decision-making authorities." (This annotated bibliography essentially aims at the same direction by more conventional and less rigorous means.)

669. ROCHBERG, Richard, Theodore J. GORDON, and Olaf HELMER. The Use of Cross-Impact Matrices for Forecasting and Planning. Middletown, Conn.: Institute for the Future, IFF Report R-10, April 1970. 63 pp.

"A cross-impact matrix is an array consisting of a list of potential future developments and two kinds of data concerning these developments: first, the estimated probabilities that these developments will occur within some specified period in the future, and, second, estimates of the effect that the occurrence of any one of these events could be expected to have on the likelihood of occurrence of each of the others. In general, the data for such a matrix are obtained by collating expert opinions derived through the use of methods such as the Delphi technique. Such a matrix is analyzed in order to revise the estimated possibilities of occurrence of each development in light of the expected cross impacts of other events on the list, (and to) discover how a change in the probability of occurrence of one or more events (by virtue of a technological breakthrough, a social change, a policy decision) might be expected to change the probabilities of occurrence of other events on the list." (p. 1)

The possible benefits of such an approach are the prompting of meaningful questions, serving pedagogical purposes, comparing the plausibility of scenarios, providing a predictive device in areas in which exact causal relationships are extremely difficult to discern, and providing a method of simulating certain policy actions. (p. 42)

This technical report of ongoing methodological development will probably be of interest only to specialists in forecasting. (Also see items no. 33 and 34 concerning IFF applications of the Delphi technique.)

670. U.S. Congress. House Committee on Science and Astronautics. Technology: Processes of Assessment and Choice. Report of the National Academy of Sciences. Washington: USGPO, July 1969. 163 pp. $.75.

"Technology Assessment" describes "what occurs when the likely consequences of a technological development are explored and evaluated. (The) objective is . . . to foster a more constructive evolution of our technological order." (p. 3) This authoritative report includes chapters on existing processes of assessment and decision, formulation of objectives, problems and pitfalls, and approaches and recommendations. It is concluded that new assessment mechanisms are needed with a broader and less self-interested viewpoint. To this end, "the panel urges the creation of a constellation of organizations, with components located strategically within both political branches, that can create a focus and a forum for responsible technology-assessment activities throughout government and the private sector . . . such organizations must be separated scrupulously from any responsibility for promoting or regulating technological applications . . ." (p. 117)

671. U.S. Congress. House Committee on Science and Astronautics. A Study of Technology Assessment. Report of the Committee on Public Engineering Policy, National Academy of Engineering. Washington: USGPO, July 1969. 208 pp. $1.25.

A summary of findings and commentary about the concept and practice of technology assessment, with three experiments and an analysis of the methodology employed. Of particular interest is the first experiment, Technology of Teaching Aids, where alternative strategies of using ETV and CAI in higher education and their impacts are explored. (pp. 37-76) Although these experiments are preliminary, they indicate the scope and direction of future efforts. It is concluded that technology assessments are feasible, and that they can help to alert the nation to future benefits and to future problems, if produced in an environment free from political influence or predetermined bias.

672. BLOFELD, John (trans.). I Ching: The Book of Change. London: George Allen & Unwin, 1965; N.Y.: E. P. Dutton, 1966. 228 pp.

A new translation of one of the enduring books of the world, parts of which "are at the very least three thousand years old." Although scholarly, it is in "the simplest possible language," in contrast to the translation by Richard Wilhelm (with a sympathetic introduction by Carl G. Jung), which is compared on pp. 16-18. Blofeld claims that this method "enables any reasonably unselfish person who is capable of fulfilling a few simple conditions both to foresee and to

control the course of future events." (p. 14) "I must make it clear that it is not one of those ordinary fortune-telling books which forecast future events and leaves us to sit back passively awaiting them. . . . It makes us architects of our own future, while helping us to avoid or minimize disasters." (p. 16)

"A really skilled interpreter who consults The Book of Change correctly will find that the answers given are NEVER WRONG!" (sic., p. 33) The problem is in acquiring skill in dealing with divining sticks and the 64 hexagrams of Yin and Yang lines. The appropriate mental set is also necessary, including a keenness of intuition, which Blofeld sees as increasingly neglected by the West. "This seemingly occult aspect of the book . . . is likely to call forth disbelief and even scorn from Westerners who have never put it honestly to the test. I have no means of convincing skeptics unless by asking them to test its power in all sincerity, which their very disbelief will make virtually impossible for them. Correct interpretations of the oracles requires a particular state of mind--here again, students of Zen possess a special advantage--in which respect based on belief is a vital factor." (p. 24)

Some Westerners in the "counter-culture" are devotees of this volume. Although Western futurists may be incapable of utilizing this method, it is well to nevertheless consider it as an alternative valued by many.

673. The I Ching or Book of Changes. The Richard Wilhelm translation rendered into English by Cary F. Baynes. Foreword by C. G. Jung. Preface to the Third Edition by Hellmut Wilhelm. Bollinger Series XIX. Princeton: Princeton University Press, 1967. 740 pp. $6.00.

674. LEGGE, James (trans.). I Ching. Book of Changes. N.Y.: University Books, 1964; Bantam, 1969. 448 pp. $1.25.

For a shorter version of this translation, see Clae Walthon. I Ching. The Chinese Book of Changes. Arranged from the work of James Legge. N.Y.: Ace, 1969. $.95.

675. de BONO, Edward. New Think: The Use of Lateral Thinking in the Generation of New Ideas. N.Y.: Basic Books, 1968. 156 pp. $5.95.

This slim and simply written volume is easily as important as any of the ponderous tomes on rational methodology, which de Bono characterizes as "vertical thinking" or digging the same hole deeper. "Lateral thinking is based on biological information processing principles which differ from the physical information processing principles of mathematics, logic, and computers." (pp. 1-2) It is not a magic formula, but an attitude and habit of mind. It is not a substitute for vertical thinking, but a complementary process. It is not simply creative thinking, which often requires a talent for expression, for it is open to everyone interested in new ideas.

The principles of lateral thinking involve the recognition of dominating ideas, the deliberate search for alternative ways of looking at things (which is not considered to be natural), relaxing the rigid control of vertical thinking, and the use of chance. Many examples are given from the hard sciences and from stage magic, which "takes advantage of people who use high probability or vertical thinking." Although no examples are given as to lateral thinking about society, education, or the future, this book is nevertheless quite appropriate to such concerns. (Also see Edward de Bono, "Zigzag Thinking," The Futurist, IV:1, February 1970, pp. 29-31; New Yorker, April 5, 1971) RECOMMENDED

676. LEWINSOHN, Richard. Science, Prophecy and Prediction. N.Y.: Fawcett Publications, 1962. 304 pp. (Originally published in Germany, n.d.)

A popular but sober history of the art of prophecy, covering astrology, dream interpretation, election forecasting, weather forecasting, gambling, business cycles, etc. This book is a worthwhile overview of traditional methods, as opposed to several recent books written for the astrological/mystical audience, e.g., Harvey Day, Seeing Into The Future (Hollywood: Wilshire Book Co., 1967) and Edward Albertson, Prophecy for the Millions (Kingsport, Tenn.: Sherbourne Press, 1968).

677. MANNHEIM, Karl. Ideology and Utopia: An Introduction to the Sociology of Knowledge. N.Y.: Harcourt, Brace & World, 1968. 318 pp. (First published in 1936)

A classic essay that could prove of considerable value to the self-awareness of futurists. "A state of mind is utopian when it is incongruous with the state of reality within which it occurs." (p. 173) Chapter 4 discusses four forms of the utopian mentality: orgiastic chiliasm, the liberal-humanitarian idea, the conservative idea, and the socialist-communist utopia.

678. BESTUZHEV-LADA, I., "Bourgeois 'Futurology' and the Future of Mankind," Political Affairs: Journal of Marxist Thought and Analysis (Theoretical Journal of the Communist Party, U.S.A.), September 1970, pp. 37-50.

Capitalists get their come-uppance here, for "it is common knowledge that it was Marxism which put the study of social concepts of the future on a scientific footing more than a century ago." (p. 37) Today, "Marxist-Leninist social prognostication" is opposing bourgeois futurology which plays the dual role of supplying economic and political strategy for imperialism as well as new arguments in the ideological struggle against Communism. The prevailing thesis among Western writers is "that capitalism will not only survive the 20th century but will be capable of overcoming its inherent contradictions in the future." (p. 42) The author obviously thinks otherwise: "the principal result of the scientific and technological revolution of

(cont'd)

our time is the objective formation of the material prerequisites of the communist mode of production everywhere." (p. 49) Alternatives to capitalism/communism are not, of course, considered.

679. KRUTCH, Joseph Wood, "What the Year 2000 Won't Be Like," Saturday Review, January 20, 1968, p. 12+.

A brief and readable critique of much of the future-casting to date. "There are so many conflicting forces making for so many possibilities that there are a dozen possible futures, no one of which seems certain enough to justify saying 'This is what it is going to be like' . . . each prophet tends to concern himself almost exclusively with trends observable in his own field of study . . ." (p. 12)

680. NISBET, Robert A., "The Year 2000 and All That," Commentary, June 1968.

A skeptical view of contemporary futurist activity, which is seen as no better and generally worse than the forays into the future that our great grandfathers made. "The only real utility of these fast accumulating reports and books on the future is the often enlightening, generally informative, sometimes brilliant perceptions they contain about the present."

681. ZIEGLER, Warren L., with the assistance of Michael MARIEN. An Approach to the Futures-Perspective in American Education. Syracuse: Educational Policy Research Center, May 1970. 103 pp.

A synthesis of the attempts to define alternative educational futures in the U.S., discussing the idea itself and the various methodologies in the macrosystem context of the educating domain, or "the education complex" (which includes the "periphery" of adult education, suppliers to educating institutions, and organized beneficiaries--especially students). Five planning models are discussed: the future-as-the-present, the future-as-an-extrapolation-of-the-present, the single alternative future, the technological future, and the comprehensive future. Problems in the polity, in policy-formulation, and in planning are discussed, and the document is concluded with two critiques by outsiders. RECOMMENDED

682. Educational Policy Research Center at Syracuse. Notes on the Future of Education, 1:3, Fall 1970. Special Issue on Methodology.

Four brief articles discussing problems of planning and policy, the limitations of the Delphi method as a forecasting tool and its applications as an educational device, econometric modeling explained to the laymen, and macro-system forecasting (an exploratory paper suggesting a syncretic methodology combining general systems theory, social indicators, and forecasting in order to attain an overview of "the education complex").

683. HIRSCH, Werner Z. and Colleagues. Inventing Education for the Future. San Francisco: Chandler Publishing Co., 1967. 353 pp.

19 articles arising from the 1965-66 Educational Innovations Seminar at UCLA. Largely concerned with methodology of planning and future-casting, and methods of introducing change.

684. ADELSON, Marvin (ed.), with Marvin C. ALKIN, Charles CAREY, and Olaf HELMER, "Planning Education for the Future: Comments on a Pilot Study," The American Behavioral Scientist (Special Issue) 18:7, March 1967.

A multidisciplinary study entitled Innovation in Education, carried out at the UCLA Institute of Government and Public Affairs. Based on a Delphi exercise, with 93 proposed innovations arranged in a relevance tree format (p. 26), and an emphasis on allocative decisions. It was concluded that "the procedure was looked on by all of the participants as potentially very useful in educational planning at all levels." (p. 27)

685. HELMER, Olaf. The Use of the Delphi Technique to Problems of Educational Innovations. Santa Monica: The RAND Corporation, P-3499, December 1966.

686. ROSOVE, Perry E. The Use of Contextual Mapping to Support Long-Range Educational Policy-Making. Santa Monica: System Development Corporation, SP-3026, December 1967. 36 pp.

Discusses a method to display "logical and causal dependencies of functionally related phenomena" as concerns education. (See item 346 for an application of this method to future roles of educators)

B. Planning and Policy-Making

687. JANTSCH, Erich (ed.). Perspectives of Planning. Paris: Organisation for Economic Co-Operation and Development, September 1969. 528 pp. $12.00. (Available from OECD Publications Center, Suite 1207, 1750 Penna. Ave., Washington, D.C. 20006)

Proceedings of the OECD Working Symposium on long-range forecasting and planning, Bellagio, Italy, Fall 1968. "The present volume includes a general declaration agreed by all the participants, an impression of the content of the meeting by Dr. Erich Jantsch, who had organized it, the original papers as well as subsequent reflections by some of the authors. It is hoped that it will give some indication of the present state of development of this important but difficult subject and of its possible relevance in our technological societies." (OECD catalog)

688. BAUER, Raymond (ed.). Social Indicators. Cambridge: MIT Press, 1966. 357 pp.

"The focus of this volume is nothing less than the entire set of social indicators used in our society--statistics, statistical series, and all other forms of evidence--that enable us to assess where we stand and are going with respect to our values and goals, and to evaluate specific programs and determine their impact . . . Historically this book can be compared with the efforts of the economists thirty years ago to create a stable and useful set of economic indicators." (book jacket abstract)

689. Educational Policy Research Center at Stanford. Toward Master Social Indicators. Menlo Park, Calif.: Stanford Research Institute, Research Memorandum EPRC 6747-2, February 1969. 52 pp.

A discussion of social accounting, with particular emphasis on deriving master indicators (critical and aggregative indicators in hierarchical schema), relating indicators of individuals and social systems, and attaining "a comprehensive system of national social data capable of generating descriptive social reporting, projective social trending, and predictive social accounting." (p. 46)

690. KAHN, Alfred J. Theory and Practice of Social Planning. N.Y.: Russell Sage Foundation, 1969. 348 pp. $8.75.

Clarifies the major phases of the planning process: definition of the task, policy formulation, programming, evaluation and feedback, and discusses how planners cope with issues of fact and value. The role of futuristics is not considered. Studies in Social Policy and Planning (Russell Sage, 1969; 326 pp.), by the same author, is a companion volume providing case studies on the anti-poverty war, children in trouble, income security, community psychiatry, etc.

691. EWING, David W. The Human Side of Planning: Tool or Tyrant? N.Y.: Macmillan, 1969. 216 pp.

A popularized discussion of tailoring programs to people and the job of the planning leader. Argues strongly for an emphasis on non-quantifiable variables, or the human side.

692. WILLIAMS, Walter. Social Policy Research and Analysis: The Experience in the Federal Social Agencies. N.Y.: American Elsevier, Policy Science Book Series, 1971. 210 pp. Approx. $17.50.

"Investigates the manner in which social science research techniques may be developed and used by policy makers of federal social agencies to improve anti-poverty and equal-opportunity programs. Analyses of a number of federal projects to aid the disadvantaged provided the factual background for this study." (advt.)

693. DROR, Yehezkel. Public Policy-Making Re-examined. San Francisco: Chandler, 1968. 370 pp.

An authoritative work discussing contemporary policy-making and proposing an optimal model characterized by rational and extrarational components. See Chapter 17, "Changes Needed in Knowledge" (and especially notes on policy science, pp. 240-245); also discussion in Chapter 19 on organizations for policy analysis. Excellent bibliographic essay, pp. 327-356. RECOMMENDED

694. DROR, Yehezkel, "Policy Analysts: A New Professional Role in Government Service," Public Administration Review, 27:3, September 1967, pp. 197-203.

Advocates a new "policy science" interdiscipline, combining present methods of systems analysis with qualitative methods and a full awareness of the special characteristics of political phenomena. One of the essential features of policy analysis would be much more emphasis on futuristic thinking. RECOMMENDED

695. DROR, Yehezkel. Ventures in Policy Sciences: Concepts and Applications. Policy Sciences Book Series. N.Y.: American Elsevier, Summer 1971. Approx. 350 pp. and $16.50. (Includes a chapter on "A Policy Sciences View of Futures Studies")

696. LASSWELL, Harold D. A Pre-View of Policy Sciences. N.Y.: American Elsevier, Policy Sciences Book Series, 1971.

697. LINDBLOM, Charles E. The Policy-Making Process. Englewood Cliffs, N.J.: Prentice-Hall, Foundations of Modern Political Science Series, 1968. 122 pp.

698. CONANT, James Bryant. Shaping Educational Policy. N.Y.: McGraw-Hill, Carnegie Series in American Education, 1964. 139 pp.

Essays on the development of policy-making for public schools and higher education, with a close examination of New York and California. The advocacy of interstate cooperation for a "nationwide" educational policy (Chapter 5) was instrumental in the formation of the Education Commission of the States.

699. BEREDAY, George Z. F. and Joseph A. LAWERYS (eds.). Educational Planning. The World Year Book of Education. N.Y.: Harcourt, Brace, and World, 1967. 442 pp.

A competent pre-PPBS, pre-futurist volume oriented to economic approaches.

700. BOWLES, Samuel. Planning Educational Systems for Economic Growth. Cambridge: Harvard University Press, 1969. 245 pp. $7.00.

Discusses inputs and outputs, long-run demand for educated labor, a model for efficient allocation of resources, and alternative approaches

(cont'd)

to educational planning. The volume uses many examples from Northern Nigeria and Greece, based on the author's experience. The relevance to planning in post-industrial nations, however, may be limited.

701. NOZHKO, et. al. Educational Planning in the USSR. With Observations of an IIEP Mission to the USSR. Paris: UNESCO, International Institute for Educational Planning, 1968. 295 pp.

Especially see "Prospects for the development of education," pp. 173-176.

702. WEBSTER, Maureen (comp.). Educational Planning and Policy: An International Bibliography. Syracuse: Educational Policy Research Center, June 1969. Working Draft. 654 pp.

Seeking to be comprehensive, international, and action-oriented, 4927 items are included--most of them published in the 1960's. An elaborate categorization is provided, with indexes by author, country and region. The six major categories are Education and National Development, Comprehensive and Partial Planning, Financing Educational Plans, Influences on Plan Targets, Productivity and Efficiency, and Bibliographies. An updated edition of about 8000 items will be published in Fall 1971, with a major shift in focus toward non-school education and alternative futures for learning. RECOMMENDED

703. International Institute for Educational Planning. Educational Planning: A Bibliography. Paris: IIEP, 1964. 131 pp., annotated.

Probably outdated.

704. ANDERSON, C. A. The Social Context of Educational Planning. Fundamentals of Educational Planning 5. Paris: UNESCO, International Institute for Educational Planning, 1967. 35 pp.

705. Organisation for Economic Co-Operation and Development. Methods and Statistical Needs for Educational Planning. Paris: OECD, 1967. 363 pp.

"Contains the results of a major effort to identify basic data needed for educational planning . . . Useful primarily for industrial countries with relatively good statistics." (Coombs)

706. PLATT, William J. Research for Educational Planning: Notes on Emergent Needs. N.Y.: Unipub, Inc., 1970. $2.00.

Based on background documentation prepared for a workshop sponsored by the International Institute for Educational Planning.

707. Educational Planning: A World Survey of Problems and Prospects. N.Y.: Unipub, Inc., June 1970. $4.50 paper.

708. ELAM, Stanley and Gordon SWANSON (eds.). Educational Planning in the United States. Itasca, Ill.: Peacock, 1969. 216 pp. $6.50.

"A detailed examination of planning in U.S. schools from a long-range, multidisciplinary, worldwide perspective. It tells what is to be planned, how planning can be done, who is to do it, and what planning may achieve." (advt.)

709. MORPHET, Edgar L. and David L. JESSER. Cooperative Planning for Education in 1980: Objectives, Procedures, and Priorities. (Designing Education for the Future, Vol. 4) N.Y.: Citation Press, 1968. 105 pp.

Four articles concerned with prospective changes in society and the implications for educational planning. RECOMMENDED

710. DAVIS, Russell G. Planning Human Resource Development: Educational Models and Schemata. Chicago: Rand McNally, Education Series, 1966. 334 pp. Bib., pp. 311-322.

A technical approach utilizing flow, output, and cost measures. Bibliography of about 165 items on education and educational planning.

711. National League of Cities. Education and Manpower Strategies and Programs for Deprived Urban Neighborhoods: The Model Cities Approach. Washington: National League of Cities, 1968.

Report of workshop held to identify effective strategies for planning, initiating and coordinating comprehensive deprived neighborhood manpower and education programs.

712. MILLER, Donald R. and Jerry J. DONOVAN (comps.). A Selected Bibliography of Planning-Programming-Budgeting Systems (PPBS) in Education. Burlingame, Calif.: OPERATION PEP: A Statewide Project to Prepare Educational Planners for California, March 1970. 92 pp.

About 1200 items arranged alphabetically with no categorization or annotation.

713. HARTLEY, Harry J. Educational Planning-Programming-Budgeting: A Systems Approach. Englewood Cliffs: Prentice-Hall, 1968. 290 pp. $7.95.

An authoritative work aimed at legitimizing the PPB system for local school districts, and suggesting the state of non-futures-thinking at the time of writing. Although heralded as an important step in the evolution of budgeting practice in the late 1960's, there is now a question as to when--if at all--PPBS will be truly adapted.

714. CHURCHMAN, C. West. The Systems Approach. N.Y.: Dell Publishing, Delta Books, 1968. 243 pp. $2.25.

A non-technical introduction to systems, systems thinking, the systems approach to the future, and the systems approach and human beings.

(cont'd)

The book examines four different ideas as to what really constitutes the systems approach, juxtaposing them in the context of a debate between the advocates of efficiency, the scientists, the humanists, and the anti-planners.

715. HOOS, Ida R., "Systems Analysis as a Technique for Solving Social Problems: A Realistic Overview," Socio-Economic Planning Sciences, 4:1, March 1970, pp. 27-32.

A severe critique of "the mixture of salesmanship and politics which dominates the applications of systems analysis . . . systems studies are a handy political tool. They can justify an ideological position by strategic inclusion or exclusion of pertinent data; they can provide simplistic solutions to complex problems."

716. MEALS, Donald, "Heuristic Models for Systems Planning," Phi Delta Kappan, 48:5, January 1967.

An explanation of the systems approach to policy-making: "Above all else, the systems approach is an attitude of mind--a way of seeing the world."

717. BANGHART, Frank W. Educational Systems Analysis. N.Y.: Macmillan, 1969. 330 pp.

A scientistic discussion of management and decision-making, with assumptions such as "The problem in any type of systems activity is to retain the integrity of the system and to try to minimize the tendency of the system to degenerate." (p. 35) There is no discussion of system lag or change, and this book is therefore better characterized as a treatise on systematic analysis rather than the analysis of a system (which necessarily requires an analysis of the environment in time and space).

718. PFEIFFER, John. New Look at Education: Systems Analysis in Our Schools and Colleges. N.Y.: The Odyssey Press, 1968. 162 pp.

A popularized overview of gaming, planning, and the Delphi technique.

719. National Education Association. Rational Planning in Curriculum and Instruction: Eight Essays. Washington: NEA Center for the Study of Instruction, 1967. 203 pp.

720. LEU, Donald J. Planning Educational Facilities. N.Y.: Center for Applied Research in Education, 1965. 115 pp.

A summary of recent trends in school buildings (pp. 4-6), and a final chapter entitled "A Look into the Future" in which it is stressed that educational facilities should be geared to changes in programs. Note that the "little school" concept of satellites around a servicing core (p. 104) parallels the "cluster college" concept at higher levels.

721. GLENNY, Lyman A., et. al. A Survey of Research and Perspectives on National Planning for Higher Education. A Report to the Academy for Educational Development. Berkeley: Center for Research and Development in Higher Education, May 1969. 56 pp. Mimeo.

Results of visits and interviews with key staff members of about three dozen research agencies "considered to have a potential for conducting research of high quality which could contribute to national planning efforts."

722. BERVE, Nancy M. Present Planning for Higher Education. Studies in the Future of Higher Education, Report No. 1. N.Y.: Academy for Educational Development, July 1967. 275 pp.

The first in a series of studies conducted under contract with the National Institutes of Health, with cosponsorship by the U.S. Office of Education, the National Science Foundation, and the Public Health Service Bureau of Health Manpower. Presents a two-page summation of higher education planning for each of the states, and listings of new institutions, regional associations, organizations involved in higher education planning, legal mechanisms for planning, etc.

723. WILLIAMS, Harry. Planning for Effective Resource Allocation in Universities. Washington: American Council on Education, 1966. 78 pp.

A discussion of conventional budgeting compared to program budgeting. The higher education equivalent of Hartley's book (Item no.713). Unannotated bibliography of 35 items, pp. 77-78.

724. KNORR, Owen A. (ed.). Long Range Planning in Higher Education. Boulder, Colo.: WICHE, April 1965. 128 pp.

Eight articles on various aspects of planning, based on the sixth annual Institute on College Self-Study. Bibliographies are provided at the end of each chapter, with about 150 items in all. Especially see p. 51 for a bibliography of 24 state plans and planning documents prepared in the 1958-1964 period.

725. McGRATH, Earl J. (ed.). Cooperative Long-Range Planning in Liberal Arts Colleges. Published for the Institute of Higher Education. N.Y.: Teachers College, 1964. 108 pp.

A nuts and bolts examination of admissions policy, tuition, institutional research, etc., with no consideration of broad trends and futures. Dull and outdated.

C. Planning for Change in Education

726. MORPHET, Edgar L. and Charles O. RYAN (eds.). Planning and Effecting Needed Changes in Education. Designing Education for the Future: An Eight-State Project, Reports Prepared for the Third Area

(cont'd)

Conference. Denver, Colo.: June 1967. 317 pp.

26 articles, largely by professional educators, on planning for and effecting change in schools, school systems, metropolitan areas, and at the state level. Vol. 3 of a continuing series.

727. HAVELOCK, Ronald G., and Others. Planning for Innovation: Through Dissemination and Utilization of Knowledge. Ann Arbor: University of Michigan, Institute for Social Research, Center for Research on Utilization of Scientific Knowledge, 1970 (?). 538 pp. $8.00 paper.

A review and integration of the relevant literature on innovation, dissemination, and knowledge utilization.

728. HAVELOCK, Ronald G., Janet C. HUBER, and Shaindel ZIMMERMAN (comps.). Major Works on Change in Education: An Annotated Bibliography With Author and Subject Indices. Ann Arbor: University of Michigan, Institute for Social Research, Center for Research on Utilization of Scientific Knowledge, October 1969. 60 pp. $1.00 paper.

39 items, largely anthologies, with a detailed indexing of contributing authors and topics, and a brief critical annotation for each volume.

729. WATSON, Goodwin (ed.). Concepts for Social Change. Washington: National Training Laboratories, National Education Association, 1967. 88 pp. Change in School Systems. Washington: NTL, NEA, 1967. 115 pp.

These companion volumes provide direction to the Cooperative Project for Educational Development (COPED). The first volume has seven papers developing the core ideas about planned change. The second volume focuses attention "on the special properties and processes of the schools and on strategies for change designed to test and develop the core ideas."

730. MILLER, Richard I. (ed.). Perspectives on Educational Change. N.Y.: Appleton-Century-Crofts Division of Meredith Publishing Co., 1967. 392 pp.

16 articles on facilitating innovation. According to the editor, "Deep and strong beliefs in the democratic way, equality of opportunity, material progress, and education form the milieu for change in education." (p. 5)

731. KURLAND, Norman D. and Richard I. MILLER (comps.). Selected and Annotated Bibliography on the Processes of Change (1966 Edition). Albany: New York State Education Department, Center on Innovation. 41 pp.

Categorized by academic discipline, with about forty items on education.

732. MILES, Matthew B. (ed.). Innovation in Education. N.Y.: Columbia University, Teachers College, Bureau of Publications, 1964. 689 pp.

733. CARLSON, Richard O., et. al. Change Processes in the Public Schools. Eugene, Oregon: The Center for the Advanced Study of Educational Administration, University of Oregon, 1965. 92 pp.

Report of a 1964 seminar which "had as its main objective the enhancement of the school official's understanding of the planned change processes and of their skills in carrying out planned change." Organization theory perspective; probably outdated because of new methods and concepts.

734. MAYHEW, Lewis B. Innovation in Collegiate Instruction: Strategies for Change. Atlanta: Southern Regional Educational Board, SREB Research Monograph No. 13, 1967. 48 pp.

Discusses several techniques, including the "sociological stranger" or outside consultant, and the role of the president's leadership.

D. State-Level Planning and Reports

735. FURSE, Bernarr and Lyle O. WRIGHT (eds.). Comprehensive Planning in State Education Agencies: A 7-State Project. Salt Lake City: Utah State Board of Education, 1969.

An important compendium of reports from six states (Utah, Colorado, Texas, Iowa, West Virginia, Connecticut) and Puerto Rico, as developed under Section 505 of Title V, ESEA. The outlines of a future statewide coordination of all educating institutions (including those in non-degree-credit activity) can be seen in several states, especially Utah.

736. Advisory Council on the State Departments of Education. Focus on the Future: Education in the States. Washington: USGPO, 1968. 57 pp.

"Concentrates its major attention on the future development of State educational agencies through the comprehensive educational planning process." (GPO brochure)

737. Central Advisory Council for Education (England). Children and Their Primary Schools. Vol. 1: Report; Vol. 2: Research and Surveys. London: Her Majesty's Stationary Office, 1967. 556 pp. and 633 pp. respectively. Vol. 1 $4.95; Vol. 2 $5.85. (May be ordered from Sales Section, British Information Services, 845 Third Ave., New York, N.Y. 10022)

Known as "The Plowden Report," this thorough and comprehensive study looks at "primary education in all of its aspects and the transition to secondary education." The following are but a few of the many

(cont'd)

conclusions and recommendations: a higher priority in the educational budget should be given to primary schools (for dollars spent on older children will be wasted if not spent on them during their primary years); "Finding Out" has proven to be better for children than "Being Told"; family background is important; half-time education for 3 and 4 year olds should be provided to ease the transition from home to school; and learners must develop self-confidence in early years. RECOMMENDED

738. Living and Learning. The Report of the Provincial Committee on Aims and Objectives of Education in the Schools of Ontario. Toronto: Ontario Department of Education (44 Eglinton Avenue West), 1968. 221 pp.

A lovely document, summarizing a wide array of literature and special reports, written cogently and forcefully, and amplified by photographs and drawings. The Committee arrived at two fundamental principles: a) the right of every individual to have equal access to the learning experience best suited to his needs, and b) the responsibility of every school authority to provide a child-centered learning continuum that invites learning by individual discovery and inquiry. (p. 179) Based on these principles, 258 recommendations are made in four broad categories reflecting the sequence of the report: The Learning Program, Special Learning Situations, The World of Teaching, and Organizing for Learning. The appropriate body for consideration and action is listed with each recommendation. RECOMMENDED

739. Plan for Educational Development for North Dakota, 1967-1975. Bismarck, N.D.: State Superintendent of Public Instruction, State Capitol (6 vols.), 1968.

Deals with all phases of elementary and secondary education and with teacher education. Among the recommendations was a proposal for a new kind of elementary teacher preparation program, leading to the New School of Behavioral Studies in Education at the University of North Dakota, as an instrument for constructive change in the state's schools. (See "A description of the New School, University of North Dakota." Grand Forks, N.D. 58201: The New School, May 1970. 19 pp. Mimeo.)

740. NADEL, Aaron B., et. al. The Future Requirements of Public Education in California. Prepared for the State Committee on Public Education, State of California, under contract with General Learning Corporation. Sacramento: State Education Department, January 1967. 66 pp.

After a brief look at future technological developments and urbanization, this document examines population, manpower requirements, and fiscal requirements for education at elementary and secondary levels only. Concludes that "It is quite evident that educational planning must interact with economic planning, both at state and local levels."
(cont'd)

A broader perspective, however, would suggest that educational planning should interact with far more than simply economic planning; it is therefore questionable whether "The Future Requirements of Public Education in California" have been adequately explored here.

741. Academy for Educational Development. Looking Ahead to Better Education in Missouri. St. Louis, 1966.

742. Task Force on Education. Education for the Future of Illinois. Springfield: State of Illinois, 1966.

743. Report of the Royal Commission of Inquiry on Education in the Province of Quebec (5 vols). Printer for the Government of Quebec, 1963-1966.

744. Report of the Royal Commission on Education, Province of British Columbia. Victoria: Queen's Printer, 1960.

745. Report of the Royal Commission on Education and Youth, Vol. 1. Province of Newfoundland and Labrador, 1967. St. Johns: Queen's Printer, 1967.

746. MAYHEW, Lewis B. Long Range Planning for Higher Education. Studies in the Future of Higher Education, Report No. 3. N.Y.: Academy for Educational Development, May 1969. 221 pp.

An authoritative assessment of statewide coordination systems for higher education and resultant master plans, voluntary coordination, and long-range planning of individual institutions. "Only 10 states have no master plans, higher education studies with the attributes of a master plan, or definite activities designed to result either in a master plan, or some form of coordinating agency." (p. 1) But, although "the movement towards planning seems inexorable" (p. 1), of the ten non-planning states, "all seems unlikely, for a wide variety of reasons, to produce master plans." (p. 101) There is a great similarity among the states that plan and the unquestioned assumptions that plans are based on. Mayhew aptly questions a number of these assumptions, but not in terms of alternative future states of society. Rather, in his final chapter on "The Future of American Higher Education," "the outlines of American society for 1980 are reasonably clear." (p. 172) Clarity is provided by extrapolation of various demographic trends, and a scenario of relatively little change in higher education.

747. The First Business of Our Times. A Report to the Advisory Commission for the Higher Education Study--State of Maine. N.Y.: Academy for Educational Development, September 1966.

748. Kansas: Plans for the Next Generation. A Report on Higher Education to the Board of Regents. N.Y.: Academy for Educational Development, November 1962.

E. Institutional Self-Studies

749. Quality Education in Milwaukee's Future: Recommendations to the Citizen's Advisory Committee to Comprehensive Survey of Milwaukee Public Schools and the Milwaukee Board of School Directors. N.Y.: Academy for Educational Development, August 1967.

750. LADD, Dwight R. Change in Educational Policy: Self-Studies in Selected Colleges and Universities. A General Report Prepared for The Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, 1970. 231 pp. $5.95.

Brief but well-drawn case studies of the collegial process of attempted reform at Berkeley, New Hampshire, Toronto, Swarthmore, Wesleyan, Michigan State, Duke, Brown, Stanford, Columbia, and UCLA. "While the scope and degree of the proposed changes vary, all have in common the use of the traditional, collegial process of study, analysis, discussion, and debate leading to a decision based on general acceptability. . . . Unhappily, the results of these studies seem to lend support--at least in a negative way--to the efficacy of pressure politics as a way of bringing about change." (p. 197)

"The situations reviewed here suggest that these studies have rarely succeeded in bringing about any fundamental change in educational policies on the campuses involved except where a significant portion of the faculty had accepted the desirability of some change before the study began or where pressures for change from outside the faculties were much in evidence." (p. 200)

"It is quite obvious that we can have personnel policies and purchasing policies and library policies in any university, however large. All large bureaucracies have these. What is less obvious after examination of these studies is whether or not large institutions can have educational policies--whether the American tradition of giant institutions has not, in the case of higher education, reached the point of diminishing returns." (concluding comment, p. 209)
RECOMMENDED

751. Massachusetts Institute of Technology, Special Faculty-Student Commission. Creative Renewal in a Time of Crisis. Cambridge: MIT Press, November 1970. 234 pp.

Recommends revision of freshman and sophomore curriculums, greater opportunities for individual study, greater attention to the social consequences of science, and taking seriously the intellectual problem of defining the relation of knowledge to values.

752. University of California, Berkeley Academic Senate. Education at Berkeley: Report of the Select Committee on Education. Berkeley: University of California Press, March 1966. 228 pp. $6.50; $1.95 paper.

As a response to the widely publicized events of 1964, "The Muscatine Report" offers a plethora of recommendations in areas of teaching, admissions, advising, grading, graduate education, organizational structure, and teaching assistants.

753. CHRISTENSON, Gordon (ed.). The Future of the University. A Report to the People by the Executive Planning Committee of the University of Oklahoma. University of Oklahoma Press, 1969.

The results of a year-long study to re-evaluate the university's mission, organization, and resources.

754. Duke University Committee on Long-Range Planning. Duke University in the Decade Ahead. Durham: The University, June 1961.

755. London University. The Future of Birkbeck College: Report of the Academic Advisory Commission on Birkbeck College. London: University of London, May 1967. 87 pp.

Self-study of a non-resident adult education college of the University of London and its role in meeting future demand.

756. University of Oxford, Hebdomadal Council, Commission of Inquiry. Report of Commission of Inquiry (2 vols.). Oxford: University of Oxford Press, 1966. 428 and 486 pp. respectively.

An extensive institutional self-study in response to the "Robbins Report." Most recommendations appear to be of local concern.

757. DAICHES, David (ed.). The Idea of a New University: An Experiment in Sussex. London: Andre Deutsch, Ltd., 1964; Cambridge, Mass.: MIT Press, 1970. 272 pp. $2.95 paper.

Twelve essays, not only concerned with getting the University of Sussex underway, but with the planning and design of any new university in all of its aspects, covering fundamental questions of location, size, content, and teaching methods. A short "Afterword" written in 1969 looks back on the essays written in 1964 and the experience of the University since it opened in 1961.

758. PATTERSON, Franklin and Charles R. LONGSWORTH. The Making of a College: Plans for a New Departure in Higher Education. Hampshire College, Working Paper No. 1. Cambridge: MIT Press, 1966. 364 pp. $4.95 paper.

Planning papers for a new liberal arts college in South Amherst, Mass., which "defines an organized vision of liberal education for a new era . . . to help its students learn to live their adult lives fully and well in a society of intense change, immense opportunity, and great hazards." RECOMMENDED

759. Five College Long Range Planning Committee. Five College Cooperation: Directions for the Future. Amherst: University of Massachusetts Press, 1969. 228 pp. $5.00 paper.

Composed of representatives from Smith, Hampshire, Amherst, Mt. Holyoke, and the University of Massachusetts, the LRPC was appointed "to make an extensive review of present cooperative arrangements among the five institutions, assess their strengths and weaknesses, propose long-range goals for cooperation, and establish priorities among actions required to reach these goals." (p. i) Concludes with 89 recommendations in 11 categories: academic complementarity, cooperative academic programs and activities, student course exchange, the four-one-four calendar, supplementary academic activities, coeducation and cooperation, student life, cooperative planning and use of facilities and services, community relations and public service, governance, and the economic consequences of cooperation.

As of 1965, 1017 consortiums were identified among 1509 responding institutions. (Raymond S. Moore, Consortiums in American Higher Education. Washington: USOE, September 1968.) There will surely be more cooperation in the future, forced by economic necessity and encouraged by resulting learning opportunities. The present arrangements and plans of the well-established Connecticut Valley consortium may very well serve as a harbinger of the future. RECOMMENDED

F. Education-Related Organizations

760. VOSS, John and Paul L. WARD (eds.). Confrontation and Learned Societies. N.Y.: New York University Press, 1970. 144 pp. $5.00.

Sponsored by the Conference of Secretaries, American Council of Learned Societies. Analyzes causes of disruption at recent annual meetings, and the responsibilities of learned societies to this dissent.

761. KRUMBOLTZ, John D. (ed.). Revolution in Counseling: Implications of Behavioral Science. Boston: Houghton-Mifflin, 1966. 121 pp. $2.25.

Based on the 1965 Cubberly Conference at Stanford. One of the contributors characterizes the book as "the first major attempt to propose systematically the application of behaviorism, and of operant conditioning particularly, to the counseling process." (p. v) But the "revolution" is merely one proposed to colleagues, and the outside world awaits.

762. Phi Delta Kappa Looks to the Future. Final Report of the Committee for the Study of Phi Delta Kappa (Preliminary Draft), December 1965. 123 pp. Mimeo.

The society for professional educators assesses trends, its present state, and future conditions in a rapidly changing world--resulting in the advocacy of a wide array of new policies, purposes, and objectives. A good example of an organization adapting to the times.

763. "Where Does the AFT Go From Here? (An Epilogue)," Changing Education--A Journal of the American Federation of Teachers, Summer 1966, p. 47.

A concluding statement in a special issue entitled "AFT: A 50-Year Assessment," notable for its total absence of any sense of the future. The "old liberal" goals of collective bargaining for teachers and civil rights for all Americans continue to be advocated. "The answer to the future effectiveness of the Union in meeting these challenges lies in its ability to increase its support and influence among teachers."

764. "AAUW and The Future," American Association of University Women Journal (Special Issue), 57:4, May 1964.

Conceived as an attempt to examine and elucidate the Federal Legislative Program of the Association: "to look ahead at some of the trends we may have to consider in the future." As a good example of openness, see the article by Ina Corinne Brown, "Do We Need a New Map of Reality?"

765. LOCKE, Robert W., "Has the Education Industry Lost Its Nerve?", Saturday Review, January 16, 1971.

An assessment of the state of the industry and its dampened enthusiasms for the moment.

VI. Miscellaneous

A. Pre-1960 Forecasts

766. STARRETT, Helen Ekin. The Future of Educated Women. Chicago: Jansen, McClurg, & Co., 1885. 75 pp.

A "Woman's Lib" essay on the benefits and difficulties of the educated woman.

767. DEWEY, John. The School and Society. Chicago: University of Chicago Press, November 1899; Revised Edition, August 1915. 159 pp.

A classic essay describing the "New Education" in the light of larger changes in society, and attacking "the isolation of the various parts of the school system." Much, though not all, is still relevant to today's proposals for alternative futures, e.g., "The statement so

(cont'd)

frequently made that education means 'drawing out' is excellent, if we mean simply to contrast it with the process of pouring in" (p. 36); "The pupil must learn what has meaning, what enlarges his horizon instead of mere trivialities." (p. 78)

768. DEWEY, John and Evelyn. Schools of Tomorrow. N.Y.: E. P. Dutton & Co., 1915. 316 pp.

769. CUBBERLY, Ellwood P. Changing Conceptions of Education. Boston: Houghton-Mifflin, 1909. 70 pp.

After reviewing Changes in the Nature of our Life and Changes in the Conception of the School, Cubberly contends that "We are standing on the threshold of a new era in educational progress." (p. 52)

"To convey to the next generation the knowledge and accumulated experience of the past is not (the school's) only function. It must equally prepare the future citizen for the tomorrow of our complex life . . . There are many reasons for believing that this change is taking place rapidly at present . . ." (p. 54) Needless to say, the glowing optimism has proved to be unwarranted.

770. KILPATRICK, William Heard. Education for a Changing Civilization. Three Lectures Delivered on the Luther Laflin Kellogg Foundation at Rutgers University, 1926. N.Y.: Macmillan, 1936. 143 pp.

Even though conceived nearly half a century ago, these lectures by an eminent "Progressive" are in many respects not unlike the prescriptions advocated by today's reformers. (It is not that present writers have been influenced by Kilpatrick, but rather that an anticipation of change leads to similar educational prescriptions.)

Observing that "Our young people face too clearly an unknown future" (p. 41), and "Our youth no longer accept authoritarian morals" (p. 50), it is recommended that "We must free our children to think for themselves." Older education is seen as pretending that the future will be like the present, but "no longer can one generation bind the next to its solutions. On the other hand, our young people must learn such general and flexible techniques as promise best to serve them in that unknown future." (p. 85)

But rhetoric and reality become confused when it is asserted (similar to Cubberly) that "Our schools are already changing" (p. 89), based on scattered impressions of less group precision and "straight line marching," more individual movement, school as a place where "actual experiencing goes on" and the fact that "the better schools now favor student participation in school affairs." (p. 107) Does this all sound familiar? RECOMMENDED

771. RUSSELL, Bertrand. The Scientific Outlook. Glencoe, Ill.: The Free Press, 1931. 277 pp.

The final section of the book (pp. 203-273) discusses "The Scientific Society" . . . "an attempt to depict the world which would result if scientific technique were to rule unchecked." (p. 260) Education is discussed as the provision of one kind of education for the scientific elites and another for the ordinary people. "Ordinary men and women will be expected to be docile, industrious, punctual, thoughtless, and contented . . . all the researches of psycho-analysis, behaviorism, and biochemistry will be brought into play . . . all the boys and girls will learn from an early age to be what is called 'cooperative' . . . formal lessons, in so far as they exist, will be conducted by means of the cinema or the radio, so that one teacher can give simultaneous lessons in all the classes throughout a whole country." (pp. 243-244)

772. EURICH, Alvin C. (ed.). The Changing Educational World, 1905-1930. Minneapolis: University of Minnesota Press, 1931. 311 pp.

Article on trends in vocational education and all levels of formal education.

773. COUNTS, George. Dare the School Create a New Social Order? N.Y.: John Day, 1932. 56 pp.

A classic polemic, obviously unheeded. The modern reformulation might be "dare the social order create a new school?" although others might see a chicken-egg question.

774. Educational Planning for the Future. Progressive Education Booklet No. 4. Columbus, Ohio: American Education Press, 1937. 28 pp.

Three essays having little or nothing to do with planning or the future.

775. MARITAIN, Jacques. Education at the Crossroads. New Haven: Yale, 1943. 120 pp.

The 1943 Terry Lectures at Yale. (Not seen, but according to one critic it has many of the anticipations of Reich's Greening of America.)

776. BERKSON, Issac. Education Faces the Future: An Appraisal of Contemporary Movements in Education. N.Y.: Harper, 1943. 345 pp.

777. BRAMELD, Theodore. Design for America: An Educational Exploration of the Future of Democracy For Senior High Schools and Junior Colleges. N.Y.: Hinds, Hayden & Eldredge, 1945. 165 pp.

A report of a futures curriculum project in Floodwood, Minnesota undertaken during World War II with the prospect of reconstruction ahead. A curriculum is described for three broad areas: Economic-Political, Art and Science, and Education and Human Relations, with a bibliography at the end of each section; in all more than 200 items

(cont'd)

of largely prescriptive social futures circa World War II.

778. National Education Association, Educational Policies Commission. Planning for American Youth: An Educational Program for Youth of Secondary-School Age. Washington: National Association of Secondary School Principals, 1951. 63 pp.

A summary of Education for All American Youth (1944), presenting three models of good schools in mythical communities of Farmville, Frost County (rural area), and American City--all in the imaginary state of Columbia. The prospect is pure sweetness and light, without the slightest hint of race financial problems, or urban decay.

779. FINE, Benjamin. Our Children Are Cheated: The Crisis in American Education. N.Y.: H. Holt, 1947. 244 pp.

Originally a series of twelve articles in the New York Times, this exposé is based on a nationwide tour by the author, who discovered teacher shortages, substandard teachers (as measured by credentials), educational inequality, and physical disintegration of school plants. Concludes with 14 recommendations, including higher teacher salaries and standards, assistance from the federal government, better health programs, and smaller classes. Most of these reforms have taken place, but there is perhaps an even greater crisis at present, as new issues and dissatisfactions have developed. This book might well be seen as the 1947 equivalent of Charles E. Silberman's Crisis in the Classroom (item 243).

780. BESTOR, Arthur E. Educational Wastelands: The Retreat from Learning in Our Public Schools. Urbana: University of Illinois Press, 1953. 226 pp.

An educator decries the vanishing sense of purpose and proposes an ideal of Disciplined Intelligence, and a Permanent Scientific and Scholarly Commission on Secondary Education.

781. KANDEL, Isaac L. The New Era in Education: A Comparative Study. Boston: Houghton-Mifflin, 1955. 388 pp.

Trends in world education.

782. STODDARD, A. J. Schools for Tomorrow: An Educator's Blueprint. N.Y.: Fund for the Advancement of Education, 1957. 61 pp.

"Of special historical interest . . . this booklet is widely accepted as a prophetic view of things to come." (Coombs)

783. SCHILPP, Paul Arthur (ed.). Higher Education Faces the Future: A Symposium on College and University Education in the United States of America. N.Y.: H. Liveright, 1930. 408 pp.

20 essays discussing various problems, but no attempt to look at the future.

784. FOERSTER, Norman. The Future of the Liberal College. N.Y.: D. Appleton-Century, 1938. 103 pp.

Advocates a vigorous reassertion of the perennially distinctive mission of the liberal arts college. Devoid of any social context in the present or the future.

785. FRASER, Mowat G. The College of the Future: An Appraisal of Fundamental Plans and Trends in American Higher Education. N.Y.: Columbia University Press, 1937. 529 pp.

786. CONANT, James B., "The Future of our Higher Education," Harper's, 176: May 1938, pp. 561-570.

An overview of problems. Although initially indicating that he will be prophetic, Conant goes on to advocate a desirable future knitting together aristocratic and democratic traditions in correct proportions.

787. HUGHES, R. M., "Higher Education in 1980," Journal of Higher Education, 14:2, February 1938, pp. 77-83.

Enrollment estimates speculating that by 1965, 60% of high school graduates will enter college. This estimate proved to be high, while the estimate of births proved to be very low. Hughes forecasted 687,000 freshmen in 1970, as contrasted with an actual first-time degree-credit enrollment of almost 1.7 million.

A familiar plea is also made: "Teachers must increasingly recognize their responsibility to teach students to think and to live, rather than merely to impart facts to them." (p. 83) The plea is still with us in the rising chorus of voices listed here.

788. RUSSELL, John Dale (ed.). The Outlook for Higher Education. Proceedings of the Institute for Administrative Officers of Higher Institutions, 1939. Chicago: University of Chicago Press, 1939. 256 pp.

18 articles dealing with trends in student enrollments, financing, foundations, accreditation, institutional cooperation, etc. Includes a notable misforecast by Newton Edwards, declaring "It is clear that the period of phenomenal expansion is drawing to a close." (p. 54)

789. U.S. President's Commission on Higher Education (George F. Zook, Chairman). Higher Education for American Democracy. Washington: USGPO, 1947.

Vol. 1. Establishing the Goals (103 pp.). Advocates education for a better nation, equal opportunity, general education, and education adjusted to needs.

Vol. 2. Equalizing and Expanding Individual Opportunity (69 pp.). Discusses the economic barrier, racial and religious discrimination. Recommends the assumption of greater responsibility for adult education and a national program of

scholarships and fellowships.

Vol. 3. Organizing Higher Education (74 pp.). Covers facilities, state and national organizations, and voluntary agencies.

Vol. 4. Staffing Higher Education (63 pp.). Reviews preservice and inservice education and improving working conditions.

Vol. 5. Financing Higher Education (49 pp.). Focuses on the role of the federal government.

Vol. 6. Resource Data (51 pp.). Tables.

790. HUTCHINS, Robert. The University of Utopia. Chicago: University of Chicago Press, 1953. 103 pp.

Points out hazards to education such as industrialization, specialization, philosophical diversity, and social and political conformity. "Utopia" used as a rhetorical device: not Heaven, but simply an intelligent Western country, from which examples are provided to contrast with present practices.

791. ENGELHARDT, Fred. Forecasting School Population. N.Y.: Columbia University, Teachers College Press, Contributions to Education, No. 171, 1925. 66 pp.

Discusses the Bell System Survey Technique and other mathematical methods for improving input forecasting.

792. WOLFLE, Dael, "The Size and Quality of Future School and College Enrollments" in Joseph Spengler and Otis Dudley Duncan, Demographic Analysis: Selected Reading. Free Press, 1956, pp. 539-545.

793. THOMPSON, Ronald. Impending Tidal Wave of Students. Washington: American Council on Education, 1954.

B. New and Relevant Periodicals

794. The Futurist. A Journal of Forecasts, Trends and Ideas About the Future. Washington: World Future Society (P.O. Box 19285, Twentieth Street Station, Washington 20036). $7.50 annually.

Published bi-monthly since February 1967 and improving with each issue since its original inception as "A Newsletter for Tomorrow's World." Includes a variety of short articles, book reviews, speech extracts, as well as a member's book service offering a 10% discount on a list of about 60 books, most of them worthwhile. For an additional $10 per year, the WFS Supplemental Program offers current news on who is doing or writing what, and abstracts of recently published books. RECOMMENDED

795. Futures. The Journal of Forecasting and Planning. Guildford, Surrey, England: Iliffe Science and Technology Publications, Ltd. (32 High Street). $22.50 annually. (U.S. subscribers may order through

Iliffe-NTP, Inc., 300 E. 42nd St., New York, N.Y. 10017)

Published quarterly since September 1968, quite valuable but overpriced. "Contains articles and original papers on the probable and possible long-term trends in science, technology, economics, politics, and social conditions, and on the means by which desirable goals may be selected and achieved." (Journal masthead) A serious publication with an international focus. RECOMMENDED

796. Technological Forecasting: An International Journal.

Published quarterly since Spring 1969 by American Elsevier Publications (52 Vanderbilt Avenue, New York, N.Y. 10017). Vol. 1: $24.00; Vol. 2 and subsequent volumes, $26.00 annually. The journal is largely concerned with methodology rather than substantive forecasts.

797. Socio-Economic Planning Sciences

Published in England since 1968 by Pergamon Press. (American office: Maxwell House, Fairview Park, Elmford, N.Y. 10523.) Devoted to quantitative analysis of inter-disciplinary problems, especially as concerns applications of systems analysis to the planning of public welfare and community services.

798. Policy Sciences: An International Journal for the Policy Sciences.

Edited by Edward S. Quade, in association with Harold D. Lasswell and Yehezkel Dror, and published quarterly since Spring 1970 by American Elsevier Publications, 52 Vanderbilt Avenue, New York, N.Y. 10017. "Policy Sciences will provide a forum for the developing interest in the application of structured rationality, systematic analysis, and inter-disciplinary knowledge to problems of public policy. It will include applied studies analyzing specific problem areas, theoretic studies on the methods, content, and problems of the policy sciences, and papers dealing with the policy sciences as a subject for research and teaching and as a new profession." (advt.)

799. Social Policy (Frank Riessman, Editor).

Published bi-monthly since May/June 1970 by International Arts and Sciences Press (901 North Broadway, White Plains, N.Y. 10603). $8.00 a year; $14.00 for 2 years; $19.00 for 3 years. Generally radical articles on education, health, welfare, and other areas of public policy.

800. Notes on the Future of Education (Donnelly J. Barclay, Editor).

Published quarterly since Fall 1969 by the Educational Policy Research Center at Syracuse, 1206 Harrison Street, Syracuse, N.Y. 13210. Subscriptions are free. The research from which these brief articles are drawn is conducted under a contract with the U.S. Office of Education. Especially see I:2 (articles on the quantity of instruction

(cont'd)

and "The Learning Force"), I:3 (special issue on methodology, with articles on macro-system forecasting, the applications and limitations of the Delphi method to education, and econometric models), II:1 (three policy articles prepared for the National Reading Center, which plans to coordinate a massive attack on functional illiteracy in the U.S.), and II:2 (special issue on three improbable probabilities: that we will be older, dumber, and poorer).

801. Interchange: A Journal of Educational Studies (Andrew Effrat, Editor).

Published quarterly since Spring 1970 by the Ontario Institute for Studies in Education, 252 Bloor Street West, Toronto 5, Ontario, Canada. $5.00 per year. Especially see Vol. 1, No. 4, "Education for the Future," and Vol. 2, No. 1, "Alternatives in Education."

802. Education and Urban Society.

Published by Sage Publications, 275 So. Beverly Drive, Beverly Hills, Calif. ($8.00 annually), since November 1968. Subtitled: "An Independent Quarterly Journal of Social Research with Implications for Public Policy."

803. Change: The Magazine of Higher Education.

Published bimonthly since 1968 by Science and University Affairs (211 West 61st Street, New York, N.Y. 10023), $8.50 per year. A more lively counterpart to the AAUP Bulletin.

804. The Chronicle of Higher Education.

Published weekly during the academic year and monthly during the summer since 1966. Annual subscription is $15.00 for 38 issues (Chronicle, 1717 Mass. Ave., N.W., Washington, D.C. 20036). A very useful--indeed, essential--publication for keeping up with new books, and commission reports which are often reprinted whole or in part.

C. Bibliographies (Not Elsewhere Classified)

805. MARIEN, Michael (comp.). Essential Reading for the Future of Education: A Selected and Critically Annotated Bibliography. Syracuse: Educational Policy Research Center, September 1970. 56 pp. Revised Edition, March 1971. 71 pp. $1.50.

A shorter version of this bibliography, with a greater emphasis on general futures literature not immediately related to education. By "creaming" the literature an introduction to educational futures is offered for new students of any age or position, while at the same time providing an overview for the very busy policy-maker. The September bibliography has 146 items plus an addendum of twelve, while the March bibliography covers 200 items. A third edition may be prepared in Fall 1971.

806. MARIEN, Michael (comp.). Alternative Futures for Mankind: An Annotated Bibliography of Societal Trends, Forecasts, and Proposals. Syracuse: Educational Policy Research Center, Fall 1971 (?), $5.00.

A bibliography similar to this one in its length and style of annotations, except that it will be devoted to futures literature in all categories: general overviews, science and technology, society, polity, economy, environment, learning, methodology, pre-World War II forecasts, selected utopian and science fiction writings, and pop forecasting (astrologers, psychics, "gee-whizzers"). This effort will necessarily be incomplete, but hopefully suggestive of the wide variety of major works on all aspects of the future. About 200 of the most important and/or future-oriented items in this present bibliography will be included, largely in the "Learning" section.

807. ROJAS, Billy (comp.). Future Studies Syllabus. Amherst, Mass.: University of Massachusetts, School of Education, Program for the Study of the Future in Education, revised edition, 1971.

Outlines of about 70 futures courses. Also see Future Studies Directory (September 1970, 288 pp., mimeo.) which lists about 60 organizations and 100 individuals throughout the world.

808. ROJAS, Billy (comp.). Future Studies Bibliography. Amherst, Mass.: University of Massachusetts, School of Education, Program for the Study of the Future in Education, August 1970. Revised Edition. 125 pp. Mimeo.

A non-annotated listing of about 2000 items in 15 major categories: comprehensive previews of the future, futurist literature of the past, futurist methodology, demographic projections, political futuristics, economics futuristics, technological futuristics, new environments, biological futuristics, cities of the future, literature of the future, sources of future ideologies, education in the future, futurists and futuristics, and critical bibliographical information. About 200 items on education are listed--nearly all of which are included here; thus this bibliography should be primarily of interest to the general futurist. Copies of this valuable document are in very limited supply.

809. MAYHEW, Lewis B. The Literature of Higher Education, 1971. San Francisco: Jossey-Bass, Spring 1971. About $7.50.

" . . . reviews the outstanding works in (the) field for 1970 and offers a lengthy essay which surveys trends in the literature from 1965 to 1970. The books Mayhew reviews are classified under the following categories: governance, history, campus unrest, reflections of presidents, institutional differences, conference proceedings and symposia, teaching and other professional procedures, curriculum, and finance." (advt.)

810. OHLIGER, John. Bibliography. Columbus, Ohio: Ohio State University, Center for Adult Education (353 Arps Hall), Fall 1970. 39 pp. Mimeo.

Prepared for an adult education seminar on "The Learning Society or the Person Learning: The Ideas of Ivan Illich and Others as They Apply to Issues of Adult Education," this extensively annotated bibliography of 95 items includes 42 items by or about Ivan Illich.

811. Summerhill Society. A Bibliography for the Free School Movement. N.Y.: Summerhill Society (339 Lafayette St., New York, N.Y. 10012), 1970 (?). $.50.

812. Directory of Free Schools. Sebastopol, Calif.: Alternatives! (1526 Gravenstein Hwy.), 1970. 32 pp. $1.00.

Lists free schools alphabetically and by state, and also contains an article on "How to Start a Free School," explaining that "A free school is an alternative institution whose purposes are twofold: First, it is a place where a group of students can obtain a meaningful education, where they can grow and develop in an atmosphere of acceptance, love and freedom . . . The second purpose is to influence the public schools. The existence of working alternative models may help to accelerate the process of social change in public school systems. The main directions of this change would include the elimination of compulsory attendance, required courses and grades."

813. The Big Rock Candy Mountain.

Published by Portola Institute, Inc., 1115 Merrill St., Menlo Park, Calif. 94025. $8.00 per year (two issues plus four supplements) or $4.00 per copy. Similar in concept to the Whole Earth Catalog, devotes itself to "resources for ecstatic education": schools, teaching methods, toys and games, publications, teaching laboratories, films, tapes, records, etc.

VII. Addenda

A. General

(Social Change and Social Goals)

814. MARTY, Martin E. The Search for a Usable Future. N.Y.: Harper & Row, 1969. 157 pp.

An eminent theologian reviews contemporary thinking among futurists and theologians, and argues "for an approach which retains the ambiguity of history and yet which motivates action and prevents paralysis" (p. 73)--a future with hope. "The sense of a useless past . . . is not to take a nihilist's view of historical life but rather to point to the creative possibilities of the moment." (p. 12) The volume goes on to point out how various approaches to the future of man and society affect the actions of people. RECOMMENDED

815. Commission on Population Growth and America's Future. Population Growth and America's Future. Interim Report of the Commission. Washington: USGPO, 1971. 56 pp. $.40.

"This Report outlines the population situation in the United States and the issues it poses; raises questions about the probable impact of future population growth and distribution, and describes how the Commission is developing answers to these questions." (GPO brochure)

816. MARKLEY, O. W. Alternative Futures: Contexts in Which Social Indicators Must Work. Menlo Park: Educational Policy Research Center at Stanford, Research Note EPRC 6747-11, February 1971. 16 pp.

"A 'morphological' method for projecting . . . a set of alternative future histories is presented, and interim results (which serve as such a set of contexts) described. Development of indicators relating the 'world macroproblem' to human well-being and fulfillment are especially urged, as their use would help illuminate difficult problems that occur in all plausible future histories starting with the present. The alternative future histories are also used to illustrate how 'normative' social indicators might be of practical value." (Abstract) The five "mid-range futures" discussed are "War" on Ecosystem Imbalance, Status Quo Extended, Imprudent Optimism (leading to a left-centrist recession and bureaucratic stultification), Excessive Reprivitization (leading to a right-centrist recession and garrison state), and Violence Escalated.

817. THEOBALD, Robert and J. M. SCOTT. TEG'S 1994: An Anticipation of the Near Future. Chicago: Swallow, June 1971. $6.00; $2.50 paper.

818. DORSEN, Norman (ed.). The Rights of Americans: What They Are--What They Should Be. Essays Commemorating the 50th Anniversary of the

(cont'd)

American Civil Liberties Union. N.Y.: Pantheon, 1971. $12.95.

31 essays, including "The Right to Equal Educational Opportunity," "The Right to Publish," "The Right of Access to Mass Media," "The Rights of Juveniles," "The Rights of Teachers and Professors," "The Rights of Students," etc. This overview of all areas of the law having an effect on personal freedom may be of considerable value to educational policy makers who wish to promulgate basic American values.

(Impacts of Technology)

819. MESTHENE, Emmanuel G. Technological Change: Its Impact on Man and Society. Harvard Studies in Technology and Society. Cambridge: Harvard University Press, 1970. 124 pp. $4.95; N.Y.: NAL Mentor Books, 1970. 127 pp. $1.25. Bib., pp. 96-124.

An overview of the ongoing research of the Harvard Program on Technology and Society, woven into three chapters on social change, values, and economic and political organization. The opening comments quickly dispose of "three inadequate views": the optimistic view of technology as a virtually unalloyed blessing, the pessimistic view of technology as an unmitigated curse, and the complacent historical view that technology is not worthy of special notice. Rather, technology is seen as outstripping traditional categories of thought, and established values and institutions, and necessary responses are suggested. The volume is concluded with a well-annotated bibliography of 70 items.

820. BAIER, Kurt and Nicholas RESCHER (eds.). Values and the Future: The Impact of Technological Change on American Values. N.Y.: The Free Press, 1969. 527 pp. Bib., pp. 472-512.

17 essays aimed "toward the discovery of ways of guiding social change in directions which are at the least not incompatible with the realization of our deepest values, and perhaps even helpful to it." (p. v) Some groundwork is laid for a new profession of "value impact forecasters," especially via methodological pieces by Rescher, Gordon, and Helmer. The other essays are largely focused on economics, and the editors readily confess the weakness of excluding views by anthropologists, sociologists, and psychologists. There are two bibliographies: the first lists 300 uncategorized items on technological progress and future-oriented studies; the second offers about 500 categorized items on theory of value.

821. TAYLOR, John G. The Shape of Minds to Come. N.Y.: Weybright and Talley, 1971. $6.95.

"Scientific developments now afoot will soon make it possible to increase our learning capabilities from birth onward, extend memory, reduce aggressiveness, shorten the time needed for sleep, eliminate criminality, and enjoy heightened sensory pleasures. In this book

John Taylor describes the chemical, surgical, electronic, and hypnotic methods that can bring about a mental revolution of tremendous importance to mankind." (advt.) (Not seen, but the advertising suggests "gee whiz" forecasting.)

822. MARTIN, James and Adrian R. D. NORMAN. The Computerized Society: An Appraisal of the Impact of Computers on Society Over the Next 15 Years. Englewood Cliffs: Prentice-Hall, 1970. 560 pp. $10.95.

Covers a wide range of topics, including discussion of "The Symbiotic Age," teaching with computers, a National Data Center, threats to privacy, changes in employment patterns, and protective action changes needed in education and law.

823. MILLER, Arthur R. The Assault on Privacy: Computers, Data Banks, and Dossiers. Ann Arbor: University of Michigan Press, 1971. 333 pp. $7.95.

Yes, it can happen here. Miller, a law professor, provides a highly readable, chilling, and competent overview of the new technology in the information-based society and the various threats to personal privacy at present and in the future. Anyone concerned with the future should read the entire book, but educational policy-makers at all levels should consider the sections on "The Testing Game" (pp. 90-105), and, more importantly, "The Little Red Schoolhouse Goes Electronic" (pp. 105-122). The latter section is a must for anyone involved with educational technology, for it is the only array of possible negative consequences that is known to this compiler. (Indeed, mention of a single negative consequence cannot be recalled from the literature cited here.)

Miller discusses the growing practice of relying on "pseudo-psycho" test results as a crutch, pointing out that "there is ample evidence that many test developers and users display a lack of concern over the significance of the impact these tests may have on some people." (p. 92) Moreover, "tomorrow's personality inventories will be considerably more sophisticated (and intrusive) than today's." (p. 101)

The anti-privacy potential of hardware in schools and colleges may well be even more frightening. Miller covers dossiers as an "inevitable by-product of computer-assisted instruction," networking data banks "so that the details of a student's educational life history can be made immediately available throughout the education system," videotape preservation of embarrassing responses of students and teachers, the numbing effect of technology on school-age populations, infiltrating subliminal messages through instructional devices, and the possible loss of trust and consequent debilitation of the student-teacher relationship. Perhaps adequate safeguards can be developed (and Miller discusses what could be done in schools, as well as in the wider society), but, at present, "Many overzealous educators appear quite oblivious to the possibility that sensitive data derived from an easily

(cont'd)

accessible and often naive student population may be used to the prejudice of the file subjects." (p. 113) RECOMMENDED

(Manpower Requirements)

824. SCHULTZ, Theodore W. Investment in Human Capital: The Role of Education and of Research. N.Y.: Free Press, March 1971. $8.75.

(Equality and Social Selection)

825. Organisation for Economic Co-operation and Development, Center for Educational Research and Innovation. Equal Educational Opportunity: A Statement of the Problem with Special Reference to Recurrent Education. Paris: OECD, February 1971. 47 pp. $1.50. (Available from OECD Publications Center, 1750 Pennsylvania Ave., Washington, D.C. 20006)

"First volume in a series which will analyze the various strategies available to policy-makers, leading to suggestions for new policies in the 1970s." (brochure)

(The Knowledge Explosion)

826. WAYS, Max, "Don't We Know Enough To Make Better Public Policies?", Fortune, April 1971, pp. 64+.

This article is of fundamental importance to all students (including educators, futurists, and policy-makers), because it asks whether modern society is "in danger of rattling apart because the progress of knowledge is so uneven in its application to the world of action."

Ways quickly dismisses the "utopian view of progress-through-knowledge," and the most recent exponent of this view, Bentley Glass (item 491). "There is considerable evidence that the more we learn the more we need to know. Few scientists think they are running out of questions. And it is the common observation of nonscientists that society in action faces more 'problems' now than it did fifty years ago." (p. 66)

Forecasting business activity and the impact of government policy, despite the advances of economics, has not become easier or more successful because "The wild cards multiply even as economists raise their skill in dealing with the determinable elements." (p. 67) One of the reasons for this paradox is that contemporary society confronts new and formidable areas of ignorance, leading to "a new kind of inertia" where change is resisted because we cast about for a higher degree of certainty. "Such, however, is the inescapable context of all policy-making in a truly complex and rapidly changing society. Either we accept the framework of acting on the basis of very incomplete knowledge or else we condemn ourselves to retaining unchanged those

institutions, like the present welfare system, for which we have lost respect." (p. 118) [Note that school system could readily be interchanged with welfare system.]

This condition is further aggravated because "Many scientists are unwilling to drop their fruitful specialized research and commit their careers to the bewildering complexities of transdisciplinary attack on the new areas of ignorance disclosed by the environmental challenge." (p. 125; or, for that matter, new areas of ignorance disclosed by the arms race, population growth, health, drugs, housing, and, of course, education.)

It is concluded that "The U.S. can and must do a better job of selecting specific lines of knowledge to be emphasized and specific lines of action on which to concentrate . . . The real complexities of our present and future call for a public temper both more humble and more resolute." (p. 128) RECOMMENDED

827. SHAPLEY, Harlow. The View from a Distant Star: Man's Future in the Universe. N.Y.: Basic Books, 1963.

An eminent astronomer writes in popular style about man's knowledge and ignorance, considering man in the frame of the universe at large: man's place in space, time and evolution, and problems of co-existing. Shapley attacks specialism in education and even wonders whether we should abandon it, feeling that "education has become largely a superficial device for concealing the ignorance within." (p. 145) A "Plateau Curriculum" is advocated (pp. 150-154), and broader comments are addressed to a "Psychozoic Kingdon" and "The Coming World State." Also of contemporary interest is the outright debunking of astrology. (pp. 130-134)

(Global Perspectives on Education)

828. BECKWITH, Burnham Putnam. The Next 500 Years: Scientific Predictions of Major Social Trends. Foreword by Daniel Bell. N.Y.: Exposition Press, 1967. 341 pp.

An imaginative, provocative, and comprehensive attempt to view the very long-range future. Simplistic views of education, ultimate world centralization, and scientization; but this "sleeper" volume should nevertheless be looked at for its vast array of mind-bending ideas.

829. SNOW, C. P. The State of Siege. The John Findley Green Foundation Lecture, Westminster College, November 1968. N.Y.: Charles Scribner's Sons, 1969. 50 pp.

This mini-book provides an excellent (albeit disturbing) introduction to future-study through a consciously pessimistic overview that juxtaposes the present world-wide malaise ("We are behaving as though we were in a state of siege") with critical future problems of population

(cont'd)

growth and famine. Although serious local famines will occur, a large-scale famine will not appear before 1980--but a major catastrophe is expected before the end of the century. To avoid this, population restriction and large-scale aid from the developed nations is required, but the eventuality of either is doubted. "To stint ourselves to avoid a disaster in twenty years--what body of people would ever do it? Right." (p. 38) Three scenarios are offered, along with an assessment of their probable occurrence. RECOMMENDED

830. KAHN, Herman and Anthony J. WIENER. The Year 2000: A Framework for Speculation on the Next Thirty-Three Years. N.Y.: Macmillan, 1967. 431 pp.

A widely known and respected volume--perhaps inordinately so, considering the focus on international politics and the possibilities of nuclear war, with little or no mention of ecology, communications, transportation, education, and the global economy. Nevertheless, it is (or has been) a modern classic. Especially see the discussion of "The Basic, Long-Term Multifold Trend"(pp. 39-64), various scenarios, and the excellent final chapter on "Policy Research and Social Change."

831. BRZEZINSKI, Zbigniew. Between Two Ages: America's Role in the Technetronic Era. N.Y.: Viking Press, 1970. 334 pp. $7.95.

A broad perspective of global trends by a leading scholar of international relations. The U.S. is seen as the "principal global disseminator of the technetronic revolution" (p. 24) and as "a society that is both a social pioneer and a guinea pig for mankind" (p. xv). ("Technetronic" has been coined by the author to connote the pervasive influence of technology and electronics.) Under these unprecedented conditions, there is an "age of volatile belief," leading to a worldwide condition of crumbling religions and ideologies. The Soviet Union is seen as steeped in "dull social and political orthodoxy," and, among five alternative paths for Soviet development (p. 164), the most probable short-term outcome is viewed as a balance between oligarchic petrifaction and technological adaptation. America is left to lead the way, despite problems with the New Left ("an essentially negative and obsolescent force"--p. 231) and doctrinaire liberals, and the future is optimistically seen as a combination of more social planning, participatory pluralism, rational humanism, and a community of the developed nations.

The distinguishing feature of "The Third American Revolution" that is creating three Americas in one (technetronic, industrial, and preindustrial) is that it "simultaneously maximizes America's potential as it unmasks its obsolescence." Unfortunately, Brzezinski is overly preoccupied with "The New Left Reaction" and "The Crisis of Liberalism" (each meriting a full chapter), while failing to seriously address the problems of American obsolescence (which are teasingly mentioned in passing throughout the volume). Despite such imbalance, this volume should be important. RECOMMENDED

832. RIBEIRO, Darcy. The Civilizational Process. Translated, and with a foreword by Betty J. Meggars. Washington: Smithsonian Institution Press, 1968. 201 pp. $6.50.

A global scheme of sociocultural evolution by a Brazilian anthropologist with a "Third World"/Marxist viewpoint. After reviewing archaic societies, regional civilizations, and world civilizations, Universal Civilization is seen as inevitable, resulting from an expansion of the Thermonuclear Revolution. Future Societies are seen as socialist formations of a new type, with eradication of differences between city and country, art once again a universal activity, and a world of almost unlimited activities both in knowledge and in action. "Once the problems of elimination of shortages and the social regulation of abundance, and of equalization of educational opportunity and generalization of public health facilities have been solved, the primary challenges confronting Future Societies will cease to be their effective use of the prodigious resources of energy, goods, and services. Instead, there will be new problems related to the appropriate use of the power of compulsion over men and the rational application of the socialization process." (p. 139) RECOMMENDED

833. FULLER, R. Buckminster. Utopia or Oblivion: The Prospects for Humanity. N.Y.: Bantam Books, Matrix Editions, December 1969. 363 pp. $1.25.

Twelve papers based on talks or articles prepared over the past several years, providing a good overview of Fuller's thought. Especially see instructions for The World Game, and the explanation of the 14 dominant concepts unique to Fuller's philosophy: universe, humanity, children, teleology, reform the environment (rather than man), general systems theory, industrialization, design science, world service industries, ephemeralization and invisible commonwealth, prime design initiative, self-disciplines, comprehensive coordination, and world community and sub-communities of world man. (pp. 309-342) In the Epilogue written for this book there is a good summation of Fuller's wildest ideas: two-mile high tower habitations, tetrahedronal floating cities, 10,000 passenger aircraft, domed-over cities, sky-floating geodesic spheres, and mobile habitats.

In summation, "The comprehensive introduction of automation everywhere around the earth will free man from being an automaton and will generate so fast a mastery and multiplication of energy wealth by humanity that we will be able to support all of humanity in ever greater physical and economic success anywhere around his little spaceship Earth. . . . My intuitions foresee (man's) success despite his negative inertias. This means things are going to move fast." (pp. 362-363)

834. McHALE, John. The Future of the Future. N.Y.: George Braziller, 1969. 322 pp. $7.95.

A wide-ranging overview, aided by scores of charts and photographs, with particular emphasis on ecology, technology, and planetary resources.

(cont'd)

Chapter 1 provides a good summation of future-study in the context of a transition toward a world-man image, and Chapter 5 continues with a discussion of individual futurists and organizations studying the future (a continuing interest of McHale). The final chapter discusses various aspects of the emerging planetary society, concluding that "we must understand and cooperate on a truly global scale, or we perish." (p. 300) RECOMMENDED

835. PECCEI, Aurelio. The Chasm Ahead. N.Y.: Macmillan, 1969. 297 pp.

An Italian industrial manager lucidly assesses the macroproblems of our time, with particular emphasis on the growing cleavage across the Atlantic brought on by the technological gap. "The gap, in effect, is between the GM age and the IBM age." (p. 64) Although Americans criticize their education system, in world perspective it is seen as far ahead: "a solid case can be made for the claim that education supports the very underpinnings of the technological gap of the future." (p. 50) To facilitate "Global Dimensions to Our Thinking," a New Approach called Project 69 is proposed to serve as "a multinationally sponsored feasibility study on systematic, long-term planning of world scope." (p. 219) RECOMMENDED

836. REIMER, Everett. An Essay on Alternatives in Education. Cuernavaca, Mexico: Centro Intercultural de Documentacion (Apdo. 479), CIDOC Cuaderno No. 1005, 1970. 93 pp. To be published in Interchange (see Item 801), 2:1, along with six responding articles.

Reimer is a colleague of Ivan Illich (items 110-114) who thinks along similar lines. It is not clear (and probably not important) as to who has originated what idea, for, as explained in the introduction to this essay, Reimer and Illich have been conversing for almost 15 years since meeting in Puerto Rico. Paolo Freire, Paul Goodman, and others have also contributed to this body of thought.

In this comprehensive essay, Reimer views school as "the universal church of the technological society" and sees the formation of a universal international curriculum. Yet, "The conclusion is inescapable: no country in the world can afford the education its people demand in the form of schools." Even in the U.S., where the richest one-tenth of the population gets ten times as much public funds for education as the poorest one-tenth, it is estimated that an additional $80 billion would be required to fully meet educational demands. Given the growing importance of schooling benefits, it is inevitable that the rich outdistance the poor both within and between nations, unless they grow in charity faster than they grow in privilege. "Since there is no precedent for such behavior, it seems wiser to turn to the other alternative, namely, not to separate education from activities which provide for more basic needs." It is also considered essential that learning resources be allocated outside the school system (as the only means of attaining equity), and that control of these resources should be in the hands of persons seeking to learn.

Schools will not be abandoned, but are seen as only one way of organizing the resources required for learning (time, space, objects, and people). A system of lifetime educational accounts is advocated (not unlike the voucher system), in addition to four laws that would effectively disestablish the school system as an educational monopoly: a law separating school and state (similar to the first amendment to the U.S. Constitution), a law forbidding favoritism based on schooling ("Where and how one has been schooled is as irrelevant to one's capacity to do a job as race or religion"), a law requiring equal sharing of public educational resources, and an effective extension of anti-monopoly laws to the field of education.

This fundamentally new dimension may significantly change the nature of our ongoing national debate over education for many years to come. RECOMMENDED

837. The Cooperator (Special Issue on the Sixth Annual International Cooperation Festival), 3:1, January-February 1971. (Available from The International Cooperation Council and The Cooperators, 17819 Roscoe Boulevard, Northridge, Calif. 91324)

The ICC is a coordinating body of 72 nonprofit groups that seek to foster the emergence of a new universal man and civilization serving the well-being of all mankind. This interesting 16 page document presents summary reports from the Festival, which attended to the theme of "Education for the New Civilization." Capsules are presented on reality therapy, religious studies, planetary consciousness, intercultural heritage, and new methods such as the pontoon transitional design for curriculum change; in addition to reports from interest groups such as the Phenomenon of Man Project, Universal Link, East-West Cultural Center, International Foundation for Psychosynthesis, Unique America (promoting Black Culture), International I Ching Studies Institute, The Phoenix Institute, etc.

(Multi-Level Perspectives)

838. ROUCEK, Joseph S. (ed.). The New Trends in Education. N.Y.: Philosophical Library, October 1971. $15.00.

26 essays dealing with topics such as adult education, minority education, rural education, police training, black education, Peace Corps, open admissions, community colleges, sex education, ecology training, programmed education, counseling trends, intercultural education, and education in prisons. The immense variety of this forthcoming collection suggests a trend away from considering education as only the activities of schools and colleges.

839. GOLENPAUL, Dan (ed.). Information Please Almanac, Atlas and Yearbook, 1970. 1024 pp.

Special future-oriented articles by Harry N. Rivlin, "American Education: Yesterday, Today, Tomorrow;" Henry Steele Commager, "The Crisis of the University;" Philip M. Hauser, "Population Explosion: Trends and Implications;" Wilbur J. Cohen, "A Ten-Point Program to Abolish Poverty," etc.

840. SANDOW, Stuart A. Emerging Education Policy Issues in Law: FRAUD. Number One of a Series. Syracuse: Educational Policy Research Center, Syracuse University Research Corporation, November 1970. 47 pp.

An experimental Delphi exercise conducted with a small group of attorneys and educators, based on a news event of a hypothetical case of fraud that 'had been' successfully pursued through the courts.

The case concerns a 19-year old student who has received a high school diploma, but can only read at a seventh grade level. His lawyers argue that the school system thus failed in its obligation to provide him with the learning skills they imply he received by awarding the diploma. 80% of the respondents saw the possibility of such an issue arising and succeeding in the courts within five years.

841. SANDOW, Stuart A. Emerging Education Policy Issues in Law: CAREER OBSOLESCENCE AND SOCIAL SECURITY. Number Two of a Series. Syracuse: Educational Policy Research Center, April 1971. 48 pp.

This second exploratory exercise concerns a future news event where an unemployed aerospace engineer claims that society has retired him and made him economically disabled, therefore creating eligibility for social security benefits. Of the 59 respondents (out of 183 approached), 70% felt that the event would occur before 1973 if unemployment continues to exist in highly technical areas. As a major implication resulting from this case, 70% also saw the final emergence of a continuing education system, and 85% saw the overall effect of the decision as beneficial.

The third case in this series (available in draft form in June 1971), entails a court decision declaring that the state must equally support all students attending any public or private institution of higher learning in the state. The fourth case (available July 1971) involves a State Supreme Court ruling which orders an immediate end to any curriculum currently offered which places state-supported campuses in direct competition with private colleges and universities where no real need exists.

Sandow is also contemplating the preparation of "future" moot courts, a conjecture handbook available to the law schools of the country, and a histogram of the legal precedents set in the 1960's as a forecasting base for the mid-1970's.

These explorations in legal futures, although presently at a very

preliminary stage, could become one of the most fruitful areas of futures research, not only in education but in other areas of our society.

B. Elementary and Secondary

(General)

842. BROWN, George Isaac. Human Teaching for Human Learning: An Introduction to Confluent Education. N.Y.: Viking, 1971. $8.50.

"Today's schools have failed to develop our children's intellects to the fullest largely because they pay too much attention to the intellect alone, ignoring the development of the other human qualities that give learning its meaning. What we need is education for the entire person: mind plus emotions, body, and spirit. Brown shows parents and teachers how it is possible to make education deeper, more lasting, and more meaningful while still working within the present educational system. Drawing upon research by the Ford-Esalen Project in Affective Education, he demonstrates how the humanistic psychologies of Abraham Maslow and Carl Rogers can be combined with new developments in fields as diverse as modern dance, contemporary theater, group therapy, physical education, and creativity training to bring about 'confluent education'--the education of the entire person." (advt.)

843. BURGETT, W. A. We Have Failed the Schools. N.Y.: Vantage Press, 1971(?). $4.50.

" . . . shows how our communities have abdicated their responsibility regarding the schools." (advt.)

844. Center for the Environment and Man, Inc. Designing a New System of Education. Hartford, Conn.: CEM (250 Constitution Plaza). Undated brochure. (For further information, call or write Dr. Milton A. Young)

According to the brochure, CEM has developed a comprehensive plan that enables a community to design and implement its own unique system of education. This New System of Education (NSE) is a renewal-oriented, zero-reject system, with the individual as the nucleus rather than the transistor. Education is therefore viewed as a total life experience. "CEM will train local people and work alongside the community as its NSE evolves into the unique system that will work for that community. Once the system is functioning CEM will withdraw to an advisory and evaluative capacity."

The new system, of course, is not unlike the "open learning system" outlined in the Foreword to this bibliography; the private consultant as implementer, however, may be the important innovation in creating

(cont'd)

alternative futures for learning. The success of the CEM method is not known.

845. CHANNON, Gloria. Homework: Required Reading for Teachers and Parents. N.Y.: Outerbridge and Dienstfrey, March 1971. 128 pp. $5.95.

A seasoned teacher describes her experiences in an experimental school in East Harlem.

846. ROTHMAN, Esther. The Angel Inside Went Sour. N.Y.: McKay, January 1971.

Describes the experimentation of New York's P.S. 8, the Livingston School.

847. STRETCH, Bonnie Barrett, "The Rise of the 'Free School'," Saturday Review, June 20, 1970, pp. 76-79+.

A good survey of the variety of free schools--or new schools or community schools--their common problems, and their common ideals of freedom for youngsters and a humane education. Six sources of further information are provided. (See items 811-813)

848. GORMAN, Burton W. Secondary Education: The High School America Needs. N.Y.: Random House, February 1971. 389 pp. $7.50.

"Presents a blueprint for restructuring [the high school] to increase student participation. Included are procedures for evaluating curricular objectives and discussion of such innovations as advanced placement classes, television teaching, teaching machines, and team teaching." (advt.)

849. GOULET, Richard R. (ed.). Educational Change: The Reality and the Promise. A Report on the National Seminars on Innovation, Honolulu, 1967. N.Y.: Citation Press, June 1968. 286 pp.

21 articles in five categories: Into the Future with Our Changing Schools; Education and Societal Needs; Systematic and Effective Innovation; Creative Directions for Innovation by Governments, Universities, and Industry; and State of Technology in Education and Its Further Development and Implementation.

850. GUTHRIE, James W. and E. WYNNE. New Models for American Education. Englewood Cliffs: Prentice-Hall, June 1971. $7.95; $4.95 paper.

851. McCRACKEN, Samuel. Quackery in the Classroom. N.Y.: Commentary Reports (165 E. 56th St.), 1970. $.75.

"A critical analysis of today's fashionable educational theorists. The Report exposes the weaknesses in the current demands for radical school reform. Includes Study Guide." (advt.)

852. RENFIELD, Robert. If Teachers Were Free. N.Y.: Delta paperback, 1971. $2.25.

"Does curriculum prevent learning? What would happen if schools really tried to individualize instruction? If we do not know what the future holds, how can we determine how our schools should prepare youngsters for that future? These and other crucial questions are examined in this important book which offers proposals that have profound, revolutionary implications not just for education, but for American society as a whole." (advt.)

853. RICKOVER, Admiral H. G. Education and Freedom. Foreword by Edward Murrow. N.Y.: Dutton, 1959. $3.50; $1.45 paper.

854. RICKOVER, Admiral H. G. American Education--A National Failure: The Problem of Our Schools and What We Can Learn From England. N.Y.: Dutton, 1963. $2.25 paper.

Concerned with the quality of American education in general and the lack of emphasis on developing the capacities of the able.

855. SARASON, Seymour B. The Culture of the School and the Problem of Change. Boston: Allyn and Bacon, March 1971. 246 pp. $8.95; paper $3.95.

The director of the Yale Psycho-Educational Clinic questions why changes have been so difficult to accomplish and suggests that we have been looking at trees instead of forests, at individuals instead of "ecological systems."

856. SHERRIFFS, Alex C. and Kenneth E. CLARK. How Relevant is Education in America Today? Washington: American Enterprise Institute for Public Policy Research (1200 17th St.), 1971. $5.75.

Part of the Rational Debate Seminars, containing views of the two spokesmen, their rebuttals, and their discussions with a seminar of informed experts, including the press.

857. SPOCK, Benjamin, M.D. Decent and Indecent: Our Personal and Political Behavior. N.Y.: McCall, 1969. 210 pp. $5.95.

The final section, "Education for What?" (pp. 187-210) discusses Primitive Parental Education, The Drift to Pedantry, etc.

858. TROW, William Clark. Paths to Educational Reform. Englewood Cliffs, N.J.: Educational Technology Publications, 1971. $7.95.

A professor emeritus of education and psychology covers present and future educational reform at all levels.

859. WEES, W. R. Nobody Can Teach Anyone Anything. N.Y.: Doubleday, March 1971. $5.95.

860. U.S. Congress, House Committee on Education and Labor, General Subcommittee on Education. Needs of Elementary and Secondary Education for the Seventies. Hearings. Washington: USGPO, Committee Print, 1970. Part 1, pp. 1-604; Part 2, pp. 605-1130.

Hearings held in late 1969. Part 1 not seen; Part 2 contains dialogues on practically every topic between the Subcommittee members and John Bremer, Paul Goodman, John Holt, Peter Schrag, Jerris Leonard, Sir James Pitman, John W. Macy, etc., in addition to assorted statements, letters, and supplementary materials. Also see item 247, a 982-page "compendium of policy papers."

(Curriculum)

861. BURNS, Richard W. and Gary D. BROOKS (eds.). Curriculum Design in a Changing Society. Englewood Cliffs: Educational Technology Publications (140 Sylvan Ave.), 1970. $8.95.

24 articles, including "Cultural Change and the Curriculum: 1970-2000 A.D.", "The Need for Curriculum Reform," "Student Unrest and the Curriculum," etc.

862. TERRY, Mark. Teaching for Survival: A Handbook for Environmental Education. N.Y.: A Friends of the Earth/Ballantine Book, January 1971. 213 pp. $1.25, paper. Bib., pp. 195-213.

A simply-written book aimed primarily at teachers and administrators, with the intention of counteracting the traditional assumptions of our educational system which have led to the destruction of our natural environment (e.g., dams are good, standard of living is based on income, etc.). Terry views all education as environment education, and goes on to describe the classroom, the school, and the district as environments, and to suggest how environmental concepts can be related to 37 different subject matter areas, e.g., driver education as an opportunity for initiating units of walker education, history as an opportunity for educating about population. A few fresh ideas here, as well as a worthwhile annotated bibliography of about 100 books and reference sources.

863. "International Education for Spaceship Earth." New Dimensions. Booklets on the Social Studies and World Affairs, No. 4. N.Y.: Foreign Policy Association (345 E. 46th St., New York, N.Y. 10017), 1970. 84 pp. Free.

A fascinating booklet directed to social studies teachers, based on an extensive study conducted by the FPA (see below). Discusses curriculum projects, innovations in teaching methods, resources for teachers (end of chapter citations total about 120 items, in addition to a listing of about 50 resource organizations), internationalizing the current curriculum, and developing global units for elementary

and secondary schools. Especially see Chapter 2, "Educational Needs for Spaceship Earth" (pp. 8-17), which itemizes goals for international education, "not utopian in the old world-federation sense . . . not to foster a sense of world citizenship that competes with the nation-state for the individual's loyalty, but to develop citizens who are capable of seeing that the nation is not the only basis of organizing to carry out the functions of society . . . learning to look at the world as a single system may be essential if we're ever going to find solutions." (pp. 10-12) RECOMMENDED

864. BECKER, James M. et. al. An Examination of Objectives, Needs and Priorities in International Education in U.S. Secondary and Elementary Schools. Conducted by the Foreign Policy Association for the U.S. Office of Education. Bethesda, Md.: ERIC Document Reproduction Service (NCR, 4936 Fairmount Ave.), 1969 (?). $24.60 hard copy; $2.00 microfiche (code No. ED-031-612).

(Governance)

865. MERANTO, Philip. School Politics in the Metropolis. Columbus, Ohio: Charles E. Merrill Publishing Co., 1970. 176 pp. $2.95 paper.

"Explains why school conflict has become so prevalent and suggests the implications for future school governance in the urban north." (advt.)

866. BOWERS, C. A., Doris DYKE, and Ian HOUSEGO (eds.). Education and Social Policy: Local Control of Education. Random House Studies in Education. N.Y.: Random House, 1970. 224 pp. $3.50 paper.

867. The Danforth Foundation and The Ford Foundation. The School and The Democratic Environment. N.Y.: Columbia University Press, 1970. 115 pp., paper.

Papers and other materials drawn from an April 1969 conference in Washington, D.C., including essays by Ramsay Clark, Robert Finch, Alan F. Westin, James M. Becker, etc.

868. BIRMINGHAM, John (ed.). Our Time is Now: Notes from the High School Underground. N.Y.: Praeger, 1970. 262 pp. $5.95.

Edited by a recent high school graduate, this volume presents a wide array of underground writings, much of it aimed at humanizing high schools.

869. POSTMAN, Neil and Charles WEINGARTNER. The Soft Revolution: A Student Handbook for Turning Schools Around. N.Y.: Delacorte, 1971. 183 pp. $4.95; $1.95 Delta paper.

"The students are the schools. Students have begun to realize it and to take action to make schools more responsive to their needs. When

(cont'd)

they succeed, a soft revolution has happened. The ways it can happen are presented here--in a handbook of strategies for students from 15 to 25 who want change without violence, who want to turn high schools and colleges around without destroying either society or themselves. The authors offer models, advice, maxims, jokes and a variety of other devices that students can use right now to hasten educational change, and they describe positive actions that students have already taken to achieve it." (advt.)

(Urban Education)

870. EDDY, Elizabeth M. Walk the White Line: A Profile of Urban Education. Garden City: Doubleday Anchor, 1967. 187 pp. $1.25.

An educational sociologist discusses the social setting of the poor and the consequences of elementary and junior high schools for the urban child in the slum neighborhood.

871. CUBAN, Larry. To Make a Difference: Teaching in the Inner City. N.Y.: Free Press, 1970. 261 pp.

An experienced teacher describes how things could be, largely based on two premises:

"First: Teachers, regardless of race, who combine intelligence, flexibility, creativity, and concern with a broad knowledge of their students, are involved with them, and are free from arbitrary restraints imposed by the school system, can make a difference with low-income youngsters.

"Second: The conventional role of the teacher--i.e., subject specialist teaching five classes a day, or a full day at the elementary level, with extra-curricular activity in addition to all the clerical trivia that burden teaching in an inner-city school--is both anachronistic and self-defeating." (pp. 241-242)

872. Committee for Economic Development. Education for the Urban Disadvantaged: From Preschool to Employment. N.Y.: CED (477 Madison Ave., New York, N.Y. 10022), March 1971. 96 pp. $1.50.

"A comprehensive review of the current state of education for disadvantaged minorities. This Statement on National Policy sets forth philosophical and operational guidelines for the successful functioning of the urban schools." (advt.)

873. McMURRIN, Sterling M. (ed.). Functional Education for Disadvantaged Youth. Published for the Committee for Economic Development. Heath Lexington, March 1971. 128 pp. $8.50; $3.00 paper.

Four papers by Ralph W. Tyler, Garth L. Mangum, Howard A. Matthews, and Seymour L. Wolfbein exploring ways in which schools can tie

education with jobs to insure productive and satisfying employment.

874. McMURRIN, Sterling M. (ed.). Resources for Urban Schools: Better Use and Balance. Published for the Committee for Economic Development. Heath Lexington, April 1971. $10.00; $3.50 paper.

Five papers suggesting sweeping reforms of taxation policy, new institutions for training teachers, an emphasis on "outputs" rather than "inputs," and innovative approaches to school design and land use.

875. McMURRIN, Sterling M. (ed.). The Conditions for Educational Equality. Published for the Committee for Economic Development. Heath Lexington, May 1971. $10.00; $4.00 paper.

Six papers on increasing educational equality in general, and on the urban poor and the Spanish-speaking minorities of the Southwest in particular.

(Facilities and Technology)

876. U.S. Commission on Civil Rights. Education Parks: Appraisals of Plans to Improve Educational Quality and Desegregate the Schools. Clearinghouse Publication No. 9. Washington: USGPO, October 1967. 104 pp. $.35.

Six provocative papers by John H. Fischer, John I. Goodlad, Francis Keppel, Dan C. Lortie, Neil V. Sullivan, and Paul Davidoff, plus a briefly annotated bibliography of 16 items.

877. DOYLE, Frank J. and Daniel Z. GOODWILL. An Exploration of the Future in Educational Technology. Montreal: Bell Canada (c/o F. J. Doyle, Business Planning, Room 1105, 620 Belmont St.), January 1971. 70 pp. Free.

A Delphi study utilizing 31 Canadian and 7 American panelists, and agreeing on the following major trends: a period of steady change in education over the next 25 years, extensive development and widespread adaptation of educational technology during the late seventies and eighties, and a change in societal values toward "a society more open to innovation, more insistent upon involvement and participation, and more oriented to the individual." Specific areas examined include computerized library systems and data banks, the adoption of CAI and A-V retrieval systems, the generic types of communications systems, the future role of the teacher, and education in the home.

The study concludes with a scenario of Education 1990 involving Information Retrieval Television systems employed in most schools, Computer Assisted Instruction systems at all levels, and a reduced role of the school due to supplementation by community resources and more sophisticated communications in the home. "By 1983 a significant number of homes will be equipped with home terminals capable of

(cont'd)

utilizing IRTV, CAI, and computerized library systems. By 1988 more than half of all households will employ these services. As a result significant numbers of post-secondary students will spend more time working at home alone or in small groups by 1980. Secondary students will follow by 1983 and primary students by 2000." (p. 65)

The pervasive optimism of this report might be questioned, however. The adaptation of this technology may at best be uneven (thereby aggravating problems of equal opportunity), and the consequences may not all be positive (a consideration ignored by the panel. See item 823 for questions that the panel should have considered.). Nevertheless, this exercise is provocative. RECOMMENDED

(Personnel)

878. U.S. Office of Education. The Education Professions, 1969-70. Washington: USGPO (Stock No. 1780-0722), 1970. 84 pp. $1.00.

"This report is concerned with the problem of educating students from low-income families and with the attempt to sharpen understanding of the issues involved." (GPO brochure)

879. U.S. Department of Health, Education, and Welfare. New Careers for the Subprofessional. Washington: USGPO (Stock No. 1780-0714), 1970. 23 pp. $.30.

"Presents the results of a conference held in July 1969 to explore the expanding role of subprofessionals, the research and development needed to provide career ladder models and appropriate training programs, and ways to increase and improve the employment of subprofessionals in three human service fields--health, education, and welfare." (GPO brochure)

880. BRENTON, M. What's Happened to Teacher. N.Y.: Avon, April 1971. $.95, paper.

(Finance)

881. "Establishing the President's Commission on School Finance." Washington: The White House (Executive Order), March 3, 1970. 3 pp. (Further information from Mr. Norman Karsh, The Commission, 1016 16th St., N.W., Washington, D.C.)

Interim reports will be made as appropriate, with the final report appearing not later than March 1972. 17 issues will be studied, such as the role of each level of government, nonpublic schools, tax structures, defining equal educational opportunity, measuring outputs, improving quality and efficiency, inner city schools, enrollment and financial projections for the 1970's, and data needs.

(Miscellaneous)

882. JOHNSON, Henry S. and William J. HERNANDEZ (eds.). Educating the Mexican American. Valley Forge, Pa.: Judson Press, 1971 (?). $6.95.

"Culturally different but not deprived, the Mexican Americans are becoming frustrated and angered by the lack of bilingual and bi-cultural programs . . . In 34 articles, leading Mexican American educators diagnose immediate concerns and propose new research-based programs." (advt.)

C. Higher Education

(General)

883. AIKEN, Henry David. The Predicament of the University. Bloomington: Indiana University Press, 1971 (?). 416 pp. $11.95.

"Large American universities in recent years have become a knowledge industry, part of a military-industrial-governmental-educational complex. In an eloquent plea to stop this trend, the author argues the case for liberal education as contrasted with narrow professional training, and urges that value as well as fact be stressed at all levels of learning." (advt.)

884. DRESSEL, Paul L., F. Craig JOHNSON, and Philip M. MARCUS. The Confidence Crisis: An Analysis of University Departments. San Francisco: Jossey-Bass, 1970. 268 pp. $8.75.

Analyzes internal structure and articulation with faculties, universities, and disciplines, concluding that departments are out of control.

885. FRANCIS, Roy G. Crumbling Walls. Cambridge, Mass.: Schenkman Publishing Co., 1971. $4.50.

A sociologist's suggestions for solving the various problems of American higher education.

886. FURNISS, W. Todd (ed.). Higher Education for Everybody?: Issues and Implications. Washington: American Council on Education, 1971. $7.00.

Papers commissioned for the 1970 ACE annual meeting.

887. HARCLEROAD, Fred F. (ed.). Issues of the Seventies: The Future of Higher Education. San Francisco: Jossey-Bass, 1970. 192 pp. $7.75.

Nevitt Sanford, Max Lerner, Ralph W. Tyler, etc., discuss society's concerns, student needs, and institutional response.

888. KERTESZ, S. D. (ed.). The Task of Universities in a Changing World. South Bend, Ind.: University of Notre Dame Press, April 1971. $15.00.

889. MAYHEW, Lewis B. Colleges Today and Tomorrow. San Francisco: Jossey-Bass, 1969. 255 pp. $7.75.

A thorough overview of the problems of higher education and various proposals for reform. The first four parts deal with The Social Context, Student Response, Institutional Reform, and Issues in Instruction. The final part (pp. 217-242) cautiously extrapolates trends in "six domains about which safe predictions are possible." In structure and organization, supra-institutional boards of control will increasingly be utilized by states, and federal cabinet rank for education should be a reality by 1980. For programs and curricula, graduate work will expand (especially in education), but no emerging pattern can be seen for undergraduate education. The student role in governance "is not likely to be greater than it presently is" because "there is little evidence that the vast majority of students want or would accept responsibility." (pp. 225-226) More deficit financing is expected, and "the most likely massive form of federal aid will be in some form of direct assistance to students." The market for college teachers is expected to remain reasonably tight through 1980. "The sixth domain is that of teaching and it is in this area that utopian thinking seems farthest from emerging reality;" that is, new technologies will still be considered experimental in 1980. RECOMMENDED

890. BURN, Barbara B. Higher Education in Nine Countries. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, March 1971. 400 pp. $7.95.

"Provides an abundance of data on such matters as institutional structure, organization, and governance; student organizations; enrollment trends; and prospects for future developments. Covers France, Great Britain, Canada, Australia, West Germany, Japan, Sweden, and the USSR. A chapter on higher education in an economically less well developed nation, India, is contributed by Philip G. Altbach. Clark Kerr contributed a chapter on evaluation of national systems of higher education." (advt.)

891. Commission on Post-Secondary Education in Ontario, Subcommittee of Presidents of Universities of Ontario. Towards Two Thousand: Post Secondary Education For Post Industrial Ontario. Toronto: Prentice-Hall, April 1971.

A sub-committee report to the Wright Commission (item 380).

892. Organisation for Economic Co-operation and Development. Innovation in Higher Education: Reforms in Yugoslavia. Report prepared by the

Institute for Social Research, University of Zagreb. Paris: OECD, November 1970. 189 pp. $4.25.

(Governance)

893. American Council on Education, Special Committee on Campus Tensions. Campus Tensions: Analysis and Recommendations. Washington: ACE, 1970. 61 pp.

Chaired by Sol M. Linowitz, the Committee points out that campus disorders could be eased by involving all members of the academic community in decision-making, holding them accountable for their actions, and improving communications among them.

894. McCONNELL, T. R. The Redistribution of Power in Higher Education: Changing Patterns of Internal Governance. Berkeley: Center for Research and Development in Higher Education, 1971. $2.00.

895. BANDER, Edward J. (ed.). Turmoil on the Campus. N.Y.: H. W. Wilson Co., 1971. $4.50.

"Articles on campus unrest, discussing its causes, the role of the university, black studies, the over-30 view, and law and order." (Chronicle of Higher Education)

896. CALIFANO, Joseph A., Jr. The Student Revolution: A Global Confrontation. N.Y.: W. W. Norton, 1970. 96 pp. $1.50 paper.

An excellent and quite readable overview essay by the former Special Assistant to President Johnson. Califano traveled to ten nations, contrasting the differences between students in pre-industrial and post-industrial nations, the common elements of student unrest abroad, and the relevance to America. Although student unrest in Europe and Japan is not associated with black-white tensions, drug problems, draft threats, or the tendency of adults to see unrest in terms of an international conspiracy, Califano nevertheless sees a profound crisis of belief among the students of all post-industrial nations, and makes recommendations for a greater measure of control for students over their lives, more attention paid to students by political parties, and meeting the problem of a college degree as an increasingly necessary prerequisite "for almost any kind of employment, short of digging a ditch" (which leads to an overcrowding of major universities and a proliferation of second and third rate universities). "There is no reason why business and government (in its role as employer) should not take a look at the thousands of jobs for which they now require a college degree and establish more realistic qualifications related to the job." (p. 81) This recommendation from a non-academic is strikingly singular, in contrast to the hundreds of academics advocating higher education for all (and thus expanded demand for their services). RECOMMENDED

897. FLACKS, Richard, "Young Intelligentsia in Revolt," Trans-action, 7:8, June 1970, pp. 47-55. Also to appear in Rod Aya and Norman Miller (eds.). America: System and Revolution. N.Y.: Free Press, 1971.

An overview of the rise of the student movement in the U.S. and other industrial societies by a seasoned participant/observer. "The future of the New Left depends now on its ability to break out of its isolation and to persuade the majority of Americans that their interests depend on the dismantling of imperialism and the replacement of capitalism with a fully democratized social order." (p. 54) Possibilities of the New Left transcending its present age and class base are subsequently explored.

898. COCKBURN, Alexander and Robin BLACKBURN (eds.). Student Power: Problems, Diagnosis, Action. Baltimore: Penguin Books (in association with New Left Review), 1969. 378 pp. $1.25.

Eleven articles by largely British student radicals, arranged in the following categories: the gathering storm, the condition of higher education, the failure of student institutions, the repressive culture, and international experience.

899. NAGEL, Julian (ed.). Student Power. London: Merlin Press, 1969. 235 pp.

Eleven essays on movements in Italy, France, West Germany, and the U.S., and the prospects of a world cultural revolution.

900. REID, Tim and Julyan (eds.). Student Power and The Canadian Campus. Toronto: Peter Martin Associates, Ltd., 1970. 226 pp. $2.95.

An assortment of documents, newspaper reports and articles on Canadian school and university disruption.

901. LIPSET, Seymour Martin and G. M. SCHAFLANDER. They'd Rather Be Left: The Past, Present, and Future of Student Activism in America. Boston: Little, Brown & Co., May 1971. $5.95.

902. HOOK, Sidney. Academic Freedom and Academic Anarchy. N.Y.: Cowles, 1970; Delta paperbacks, 1971. $2.45.

Analyzes the confrontations at Berkeley, Columbia, Colorado, NYU, and elsewhere, and advances the claim that when students use violence and "non-negotiable demands" to influence the system, they place all of academic freedom in jeopardy. "A much needed corrective for the flood of apologist-for-youth literature that characterized the first five post-Berkeley years." (Saturday Review, cited in advt.)

903. TOOLE, K. Ross. The Time has Come to say the Things that Need to be Said about Campus Violence, the Tyranny of a Minority, the Crusade of the Spoiled Children, the Parental Abdication of Responsibility, and the Lack of Courage, Integrity, and Wisdom on the Part of our

Educational Leaders. N.Y.: Wm. Morrow, 1971. $4.95.

Ample annotation is obviously provided for in the title of this personal statement by a conservative professor of history at the University of Montana.

904. GEIER, Woodrow A. (ed.). Campus Unrest and the Church Related College. Nashville: United Methodist Board of Education (P.O. Box 871), 1971. $3.00.

(General Curriculum)

905. WILSON, L. C. Open Access Curriculum. Boston: Allyn and Bacon, March 1971. $8.95.

906. HARVEY, James. Reforming Undergraduate Curriculum: Problems and Proposals. Washington: ERIC Clearinghouse on Higher Education (One Dupont Circle, Suite 630), Report 4, 1971. Free.

"Reviews curricular reform problems and outlines current proposals and curricula in operation on several campuses." (Chronicle of Higher Education)

907. TAYLOR, Alastair M., "Education and the Search for Order: 'Integrated' vis-a-vis 'Integrative' Approaches to Education," Main Currents in Modern Thought, 27:4, March-April 1971, pp. 125-131.

Argues that educators must attack the root causes of educational deficiencies at the conceptual level, for "if the basic postulates upon which the disciplines function have already become conceptually outmoded to meet tomorrow's societal requirements, the forced integration of largely irrelevant concepts in the name of 'inter-disciplinary' linkages could actually prove counter-productive." (p. 127) Taylor forecasts that "the last third of this century, marked by an accelerating impetus towards new, universalizing levels of ideation, organization, and behavior, may well appear in perspective as a period of conceptual convergence." (p. 130) The Center for Integrative Education (12 Church St., New Rochelle, N.Y. 10805), the publisher of Main Currents, has been promoting this "Conceptual convergence" for several decades, apparently with little success. Taylor's forecast is therefore an important prescription for the future, but, sadly, it appears improbable as a description of what will happen.

(Disciplines and Professions)

908. BELL, Wendell and James MAU (eds.). The Sociology of the Future. N.Y.: Russell Sage Foundation, May 1971. $12.50.

909. SUNDERLAND, John, "Ph.D. Programs in Policy Sciences: Who, When, Where, What, and Why?", Policy Sciences, 1:1970, pp. 469-482.

(cont'd)

A rambling overview touching on a variety of considerations (in contrast to Dror's "model program"--item 514). "The development of policy sciences doctorate programs is a key element in the transition of policy sciences from a multi-disciplinary stage to an interdisciplinary stage." (p. 482) Sunderland advocates programs that are experimental and flexible, where the primary aim is the intellectual and personal development of the students. The program should attract a diverse student body, representing parameters such as hard-soft, conservative-liberal-radical, conventional-unconventional, and varying degrees of non-academic experiences. Also discusses attrition, evaluation, degree requirements, student support, curriculum, and various education-research formats.

(Graduate Education)

910. CARTTER, Allan M., "Scientific Manpower for 1970-1985," Science, 172: April 9, 1971, pp. 132-140.

Cartter has been forecasting manpower requirements for some time, and "Since 1964, having been . . . puzzled by the academic community's unwillingness to view objectively either the present or the future, I have been a somewhat lonely voice trying to convince our university colleagues that most academic fields would have an oversupply of Ph.D.'s beginning about 1970." (p. 132) He is being listened to now.

But Cartter stresses that the current problems are not simply a temporary cutback in federal funds, but that "we have created a graduate education and research establishment in American universities that is about 30 to 50 percent larger than we shall effectively use in the 1970's and early 1980's." (p. 132) The price of this surplus is not only the direct social cost of about $50,000 per Ph.D. as well as the investment in those who did not complete the degree program, "but the human cost in unfulfilled expectations and discouragement may be even more important." (p. 138)

As steps toward a more informed manpower policy, Cartter applauds the commissions that have been formed in various professional associations, and advocates reduction of the retirement age, careful reevaluation by state bodies of the graduate programs in newer public institutions (where most of the expansion is taking place), and minimum support levels guaranteed by the federal government for the strongest 75-100 "national universities," or the 50-75 major departments in each discipline. Without such support, the most prestigious departments will continue to suffer the most. "This disastrous national policy must be reversed if the cure is not to be ten times worse than the disease." (p. 139)

Although the analysis is well-done within its chosen scope, the scope only considers traditional age-graded education and the existing hard science disciplines. Might there be a different picture if the re-education and continuing education needs of the entire population

were considered, in addition to transdisciplinary problem-solving brainpower needs in ecology, urban studies, oceanography, policy sciences, etc.? RECOMMENDED

(Distinctive Institutional Types)

911. JEROME, Judson. Culture Out of Anarchy: The Reconstruction of American Higher Learning. N.Y.: Herder and Herder, 1970. 330 pp. $9.50.

Discusses where most colleges are at present and shouldn't be, where a few colleges are at present and where all should be, and what all colleges should do in the "reconstruction" ahead.

In the second section entitled "Thresholds of Change," Jerome describes a variety of institutions on a continuum from "institutions of free learning" (Rochdale, Bensalem, College of the Potomac) to "experiments in prescription" (Friends World College and SUNY at Old Westbury). Antioch Columbia (a branch of Antioch in the New Town of Columbia, Md.) is described as a pluralistic response to these two extremes. The final section discusses "Tomorrow's Schools."

912. KEETON, Morris. Models and Mavericks: A Profile of Private Liberal Arts Colleges. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, June 1971. 192 pp. $5.95.

"A descriptive and statistical profile focusing on the private independent colleges and the Protestant-controlled colleges, this book offers recommendations on how these institutions might better serve our society." (advt.)

913. THACKREY, R. I. The Future of the State University. Urbana: University of Illinois Press, May 1971. $6.95.

914. BOWLES, Frank and Frank DeCOSTA. Between Two Worlds: A Profile of Negro Education. Prepared for the Carnegie Commission on Higher Education. N.Y.: McGraw-Hill, May 1971. 340 pp. $7.95.

"More than 100 Negro colleges were founded in the U.S. after the Civil War to fill the needs of black men and women in a strictly segregated society. The new problems confronting these colleges and their hopes for the future are vividly described in five contemporary institutional profiles." (advt.)

915. "The New School of Education, University of Massachusetts," Trend: A Journal of Educational Thought and Action, V:3. Spring 1969. 72 pp. (Copies are possibly available for $1.00 from Cooperative School Service Center, University of Massachusetts, Amherst, Mass. 01002)

A pot-pourri of articles describing the present and proposed activities of what may, by some, be seen as "The Education School of the Future." Headed by Dean Dwight W. Allen, there are no departments, and the

curriculum is not fixed. Rather, there is a fluctuating mixture of Centers and Programs, and the catalog of course offerings reads "To Be Announced."

(Facilities and Technology)

916. Doxiadis Associates, Inc. Campus Planning in an Urban Area: A Master Plan for Rensselaer Polytechnic Institute. N.Y.: Praeger, July 1971. $17.50.

917. ELY, Donald P. The Most Important Number is One: The Potential of Individualized Instruction in Higher Education. The J. Richard Street Lecture, 1970. Syracuse: Syracuse University Division of the Summer Sessions, 1970. 28 pp. $1.00.

Discusses instructional technology, student generated objectives, and professor generated objectives.

(Finance)

918. SHULMAN, Carol. Financing Higher Education. Washington: ERIC Clearinghouse on Higher Education (One Dupont Circle, Suite 630), Report 3, 1971. Free.

"Considers debates and proposals about financing higher education on the federal, state, and institutional levels." (Chronicle of Higher Education)

919. Commission for Independent Colleges and Universities of Pennsylvania. Study of the Financial Condition of Independent Higher Education in the Commonwealth of Pennsylvania. Harrisburg: CICU (607 Executive House, 101 S. Second St.), 1971.

Combining data from 68 private institutions in the state (or 90% of the possible universe), the Commission concludes that a "rapidly progressive financial deterioration has set in," threatening some institutions with total disaster. The decreased level of federal support and the depressed economic situation are only accelerating the problems created by rapid expansion, efforts to raise quality, and heavy student aid inputs. CICU advocates a strategy of retrenchment on all fronts, in addition to finding new revenue sources.

920. FALK, Charles. Impact of Changes in Federal Science Funding Patterns on Academic Institutions. Washington: National Science Foundation, 1971. $.75. (USGPO)

Surveys, taken in 1969 and 1970, of 104 public and private institutions that have doctoral programs in science. It was found, not surprisingly, that public institutions are somewhat better off than private institutions; for example, 28% of the private schools, as

compared to 9% of the public ones, reported overall spending cutbacks in academic science in 1970.

921. Carnegie Commission on Higher Education. The Capitol and the Campus: State Responsibility for Postsecondary Education. N.Y.: McGraw-Hill, April 1971. 144 pp. $2.95.

Although the Commission has called for an enlarged federal role in higher education for specialized purposes, this Special Report advocates preserving and improving the state systems, with regional cooperation whenever appropriate. Some of the recommendations include a broadened scope of state responsibility, so that the whole range of post-secondary education is encompassed, providing universal access to this system, limiting the powers of governors and state regulatory agencies over higher education, establishing a special commission on institutional independence within the American Council on Education, some state support of private colleges and universities, state subsidy of tuition costs for underprivileged students, easing restrictive policies on non-resident students, and abolishing residency requirements for graduate students.

D. Other Educating Institutions

(Pre-School)

922. REIF, Rita, "Remember When Crib Was a Place to Sleep?", New York Times, April 8, 1971, p. 49.

Although only a short feature article, a fundamental consideration is raised insofar as "Alternative Futures for Learning" among toddlers. It is increasingly recognized that early learning is important, and in response to this finding, the article briefly describes a demonstration of six new cribs, corrals (playpens) and play tables made by Edcom Systems, Inc. The new concept is to build a variety of educational toys into the crib: blocks to swivel, pegs to whirl, mirrors, a fish tank, plastic beads, balls, and a tape recorder that plays 15 seconds of music that the child can stop and reactivate--therefore learning to control his environment. "The three decker hexagonal 'cognition' crib is $325 plus accessories."

Also see "A Room System for Playing, Learning and Living" (New York Times, December 14, 1970, p. 62) which offers the same concept for the post-playpen set. For $395, Children's Motivational Environments provides a basic system of furniture (working on a system of dowels, blocks, and panels) that can be taken apart and put together again--a room-size three-dimensional puzzle with an infinite number of solutions. Similar to the extras on the family automobile, one can also add on multi-use toys and play equipment, pillows that also serve as hand puppets, vinyl beanbag seating in the shape of animals, and printed

cloth tie-on panels. "Among the sophisticated concepts projected for the future are a low-voltage electrical system, pulley arrangements made with Poppit-type beads, an air compressor with which to build wind tunnels or wind-driven instruments, a photo-optical kit that will work on the principle of breaking a light beam, a cam kit and a gear system--all of which . . . (are seen as) being used with the basic room system."

Here we can begin to see the weaning of technological man. These promises for the future are also important examples of how the children of the affluent have a genuine "head start" over the children of the poor. Finally, after a child has experienced learning systems such as this, how can he (or his parents) be content with traditional schools?

(Adult and Continuing Education)

923. Commission on Non-Traditional Study. (Press Release). N.Y.: The Commission (888 Seventh Ave., New York, N.Y. 10019), March 31, 1971. 5 pp. Mimeo.

The Commission, established by the College Entrance Examination Board and the Educational Testing Service, and chaired by Samuel B. Gould, hopes to provide a national perspective on developments such as off-campus study, credit by examination, and external degree programs, in order to stimulate more flexibility and diversity in higher education. Recommendations will be made "during the next two years."

924. COLLIER, Barnard Law, "Brain Power: The Case for Bio-Feedback Training," Saturday Review, April 10, 1971, pp. 10-13, 58.

"Alternative Futures for Learning" should rightfully consider possibilities for radically new areas of human learning. Bio-feedback training is such an area, and, for want of a better category, has been classified here under "Adult and Continuing Education."

Collier reports that "A steady flow of new scientific findings indicates that, with the aid of the teaching technique called bio-feedback training, man can learn to control willfully his body and his state of consciousness to a degree that has been traditionally dismissed in Western cultures as mere trickery . . ." (p. 10) Specifically, there are possibilities of control over the electrical activity of the brain, blood pressure, heart beat, contractions of the intestinal tract, and the emotions, with the benefits of visceral learning as an alternative to drugs, enabling healthy persons to cope better with their world, and men willing themselves into various states of consciousness. However, much of the data to date has been limited to animal experiments, and Collier warns about the propensity for exaggeration about progress in this area.

925. MacKENZIE, Ossian and Edward L. CHRISTENSEN (eds.). The Changing World of Correspondence Study: International Readings. University Park, Pa.: Pennsylvania State University Press, 1971. $12.50.

926. SCHAEFER, C. J. and J. J. KAUFMAN. New Directions for Vocational Education. Lexington, Mass.: D. C. Heath, February 1971. $15.00.

927. BELITSKY, A. Harvey. Private Vocational Schools and Their Students: Limited Objectives, Unlimited Opportunities. Cambridge: Schenkman, 1969. 186 pp. $7.95.

Concludes with ten major recommendations, including more joint ventures with local school systems, greater attention to those who are miscounseled, grants for disadvantaged persons enrolling in private vocational schools, etc.

(Religious Education)

928. GREELEY, Andrew M., "Catholic Education: Predictions, Predilections, Hunches and Educated Guesses About the Next Ten Years," America, 113:16, April 17, 1965, pp. 522-528.

E. Planning and Plans

(Forecasting Methodology)

929. ARMYTAGE, W.H.G. Yesterday's Tomorrows: A Historical Survey of Future Societies. Toronto: University of Toronto Press, 1968. 288 pp.

"The rise of . . . 'conflict models' of prediction out of what might otherwise be regarded as a welter of futuristic fantasies is the theme of this book. It tries to show how, out of the long process of preparatory day-dreams, imagined encounters, wish-fulfillments, and compensatory projections, a constructive debate about tomorrow is emerging, providing us with operational models about what tomorrow could, or should be. This debate (dialogue is perhaps the more fashionable term) is increasingly becoming part of the modern self whereby man is enabled to maintain his equilibrium." (p. x) An excellent survey not only of Utopian literature, but of modern scientific efforts. Although no attempt is made at an orderly bibliographic presentation, about 500 titles are mentioned in the notes (pp. 222-265), and several hundred additional titles are sprinkled throughout the text. RECOMMENDED (For chronological listing of about 550 utopian writings, see Miriam Strauss Weiss, A Lively Corpse. Cranbury, N.J.: A. S. Barnes, 1969)

930. STULMAN, Julius. Climbing to Mankind Solutions. N.Y.: World Institute Council (777 UN Plaza), Fields Within Fields . . . Within Fields, 1:3, 1968. 120 pp. $1.00.

(cont'd)

A one-man periodical promulgating globalism and the integration of knowledge. A pot-pourri of imaginative ideas, including proposals for an Executive Brain Center, Cargo City (a city within a city to enhance distribution), and Urban Distribution Satellites. The hospital of the future is advocated as a brain center rather than a bed center, and "the medical student should be goal-oriented with the attitude that everything he has been taught is to be considered already antiquated by the time he receives it." (p. 93)

"Only through a totally new method of approach such as that offered by the World Institute which maximizes man's knowledge in a constant flow, cross-catalytically across all the disciplines, breaking it down more nearly to underlying principles, and new common denominators, ultimately we believe to pulsing fields, in systems, in the 'methodology of pattern,' can he hope to cope adequately with his problems." (p. 17)

Also see an inspiring anthology edited by Stulman, Man's Emergent Evaluation (Fields Within Fields . . ., 3:1, 1970); especially "Alternate Futures and Habitability" by Willis W. Harman and "Towards a Humanistic Biology" by Abraham H. Maslow.

(Planning and Policy-Making)

931. GROSS, Bertram M., "The Coming General Systems Models of Social Systems," Human Relations, October 1967, pp. 357-374.

An imaginative and far-ranging overview of some of the realities of worldwide change and their implications for the way we look at the world (including a brief discussion of the "Learning Force" on p. 360), the trend from economic to social accounting, the varieties of the new social accounting (micro social accounting, macro-residual social accounting, and social systems analysis), and models for general reporting on social systems. This essay may be ten years ahead of its time.

932. GROSS, Bertram M. and Michael SPRINGER (eds.), "Political Intelligence for America's Future," The Annals of the American Academy of Political and Social Science: 388, March 1970.

Articles on societal guidance, the uses of social knowledge and social accounts, in addition to a bibliography of 62 items on social indicators.

933. MERTINS, Herman and Bertram M. GROSS (eds.), "Changing Styles of Planning in Post-Industrial America," Public Administration Review (Special Issue), XXXI:2, May/June 1971. (Single copies for non-subscribers available for $2.00 from American Society for Public Administration, 1225 Connecticut Ave., N.W., Washington, D.C. 20036)

13 articles including "Planning in an Era of Social Revolution" by Bertram M. Gross, "Educational Planning: Purposes and Power" by Stephen

K. Bailey, "Models for Science Planning" by Harvey Brooks, and "Planning to Heal the Nation" by Mattie L. Humphrey. RECOMMENDED

934. HOOS, Ida. Systems Analysis in Social Policy: A Critical Review. London: Institute for Economic Affairs (2 Lord North St., Westminster, S.W. 1), 1970 (?). 62 pp.

(Planning for Change in Education)

935. Organisation for Economic Co-operation and Development, Center for Educational Research and Innovation. The Management of Innovation in Education. Paris: OECD, February 1971. 67 pp. $1.75. (Available from OECD Publications Center, 1750 Pennsylvania Ave., Washington, D.C. 20006)

Report of a workshop held at St. John's College, Cambridge, July 1969.

(Education-Related Organizations)

936. National Assessment of Educational Progress Newsletter.

Published by NAEP, 201 A Huron Towers, 2222 Fuller Rd., Ann Arbor, Michigan 48105, since 1968, this free newsletter periodically reports on this fundamentally important attempt to measure what is actually known among 9, 13, 17, and 26-35 year-olds. Although the knowledge and skills measured are still in the realm of traditional factual retention, and there is no attempt to relate the knowledge of the young to that of the old, this project is nevertheless an important step toward meaningful indicators of educational progress.

A. Index by Major* Author

Abt 265
Ackoff 418
Adelson 684
Agger 279
Aiken 883
Alford 607
Allen 325, 915
Alpert 659
Altman 547
Anderson, C. 704
Anderson, D. 614
Anderson, R. 163
Armytage 929
Arrowsmith 487
Asbell 60
Ashby 432, 555
Asheim 635
Asimov 641
Axelrod 402
Aya 897

Bagdikian 645
Baier 820
Baker 636
Bander, E. 895
Bander, P. 164
Bane 354
Banfield 286
Banghart 717
Barclay 800
Barzun 218, 407
Baskin 428
Bass 520
Bauer 688
Bebell 165
Becker, E. 480
Becker, J. 864, 867
Beckwith 828
Beer 49
Belitsky 927
Bell, D. 27, 28, 442, 481
Bell, W. 908
Bender 500
Bendiner 269
Bennis 4
Benson 166
Benton 167
Bereday 117, 118, 699
Berg 44
Berger 659
Berke 355
Berkson 776
Berman 250
Bernstein 294
Berve 722
Bestor 780
Bestuzhev-Lada 678
Bettelheim 86
Bienvenu 611
Birenbaum 537
Birmingham 868
Bjerrum 37
Blakely 595
Blishen 168
Blofeld 672
Boehm 559
Boocock 264
Booher 634
Borton 146
Bowen 565
Bowers 866
Bowles, F. 914
Bowles, S. 700
Braden 75
Brameld 170, 218, 777
Breasted 261
Brenton 880
Brick 427
Brickman 171, 330, 443
Brim 366
Brewster 393
Bronfenbrenner 46, 85
Brown, G. 842
Brown, W. 621
Brubaker 255
Bruner 108

*Where there are multiple authors, only the first name is indexed - except where the second name is listed elsewhere in the bibliography.

Brzezinski 831
Buchanan 570
Budig 122
Bundy 379
Burgett 843
Burke 40
Burnett 489
Burn 890
Burns, G. 470
Burns, R. 861
Bushnell 325
Byrnes 134

Caffrey, J. 444
Caffrey, J.G. 326, 560
Caldwell 41
Califano 896
Campbell 172, 179, 303
Canty 284
Carlson 733
Carroll 10
Carter 332
Cartter 910
Castaldi 314
Cervantes 364
Chambers 569
Channon 845
Chase 6
Cheit 566
Chorafas 43
Churchman 714
Clapp 630
Clark, B. 600
Clark, D. 348
Clark, J. 266
Clark, K. 95, 173, 856
Clurman 575
Cockburn 898
Cohen 26
Coleman 174
Collier 924
Conant 177,178,218,288,337,698,786
Connery 579
Coombs 109
Coons 351, 352
Corson 80
Coulson 334
Counts 773
Cronbach 368
Cuban 871
Cubberly 769
Culbertson 179

Daiches 757
Davis 710
de Bono 675
de Brigard 34
de Grazia 180
de Jouvenel 385, 663
Dennison 227
DeSimone 497
Dewey 767, 768
Dexter 181
Dietze 445
Divoky 220, 274
Dobbins 446
Dorsen 818
Douglass 182
Downs 282
Doxiadis 916
Doyle 877
Dressel 472, 884
Drew 613
Dror 514, 693, 694, 695, 798
Drucker 3, 518, 602
Dumazedier 596
Dunham 543
Dunstan 267

Easton 509
Eble 149
Eddy 870
Edelfelt 341
Effrat 365, 801
Elam 184, 708
Eldredge 516
Ely 917
Engelhardt 791
Epstein 477
Erickson 124, 363
Escarpit 633
Etzioni 410
Evans 331
Eulau 471, 510
Eurich 138,382,383,385,531,772
Ewing 691

Falk 920
Fantini 280, 299-301
Farber 440
Faust 479
Featherstone 229
Fein, L. 278
Fein, R. 577
Fenton 254
Ferkiss 9
Ferriss 133
Feuer 78
Fine 779
Fischer 102, 551
Fish 273
Fisher 160
Fisk 448
Fitzwater 121
Flacks 897
Foerster 784
Folger 54
Footlick 186
Foshay 347
Francis 885
Fraser 785
Freedman 417
Freeman 361, 362, 567
Friedenberg 77
Freire 115
Froomkin 580
Fuchs 320
Fuller 15, 148, 833
Furniss 886
Furse 735

Gabor 661, 662
Gaff 544
Gans 90, 648
Gardner, 18,19,20,24,97,384,385
Gattegno 187
Geier 904
Gerard 561
Geyelin 651
Ginzberg 50
Gittell 280, 304-306
Glass 491, 492
Glasser 193
Glazer 283
Glenny 721
Goldman 604
Golenpaul 839
Goodlad 188-192, 249, 876
Goodman 7,70,142,218,225,384,539,860
Gordon, K. 17
Gordon, T. 33, 669
Gorman 848
Gould 923
Gouldner 508
Goulet 849
Grabman 263
Greeley 621, 622, 928
Green 105, 194, 289, 399
Greenbaum 522
Gross, B. 26, 931-933
Gross, R. 195, 196, 245
Guggenheim 197
Guthrie 93, 850

Haber 515
Habermas 449
Hamilton 549
Hammond 495
Hansen 568
Hapgood 100
Harcleroad 887
Harris 198, 199
Harrison 640
Hart 200
Harvey 906
Hatch 484
Havelock 727, 728
Havighurst 291, 292, 306
Heckman 588
Hedgepath 87
Hersey 450
Heise 201
Heiss 534
Hellman 646
Helmer 34,668,669,684,685
Henderson 386, 403
Hester 376
Hickerson 96
Hirsch 683
Hodge 285
Hodgetts 396
Hodgkinson 422
Holt 203-205, 225, 860

Hook 902
Hoos 715, 934
Horn 626
Horne 632
Horowitz 451
Howard 452
Howe 95
Hughes 787
Hunnicutt 206
Hunt 590
Hutchins 141, 790

Iannacone 270
Illich 110-114, 836
Itzkoff 207

Jantsch 665, 687
Jencks 208, 421
Jerome 911
Jessup 603
Johnson, B. 546
Johnson, H. 882
Johnson, L. 655
Joyce 209, 210
Jungk 29

Kahn, A. 690
Kahn, H. 105, 830
Kandel 781
Katz 404
Kay 328
Kaysen 563
Kean 392
Keeton 426, 453, 912
Kemelman 211
Keniston 84, 437
Keppel 94, 179, 206, 876
Kerr 17,370,384,398,890
Kertesz 888
Keyserling 360
Kilpatrick 770
Kimball 212
King 344
Kirk 488
Klotsche 536
Knorr 724
Koenig 653
Koerner 268, 338
Kohl 213
Kohn 312
Koob 620
Kostelanetz 8
Kraft 214
Kristol 576
Krumboltz 761
Krutch 679
Kruytbosch 454
Kurland 731

Ladd 750
Lane 103
Larkin 51
Lasswell 512, 696, 798
Lauter 550
Lawrence 389
Lecht 23, 47
Legge 674
LeMelle 541
Lerner 216, 887
Leonard 215, 219, 455
Leu 720
Levin 277
Levitan 55
Lewinsohn 676
Lewis 157
Leys 155
Licklider 631
Lidz 504
Lieberman 276
Lifton 150
Lindblom 697
Lindsey 342
Lineberry 217
Ling 519
Linowitz 893
Lipset 901
Litt 478
Liveright 605, 606
Locke 765
Loughary 327
Lundberg 5
Lurie 275

MacArthur 154
Machlup 45, 104
Mackenzie 925

Maclure 610
Madsen 553
Mangum 52
Mann 413
Mannheim 677
March 493
Marcus 302
Margolin 324
Margolis 384
Marien, 144,145,681,805,806
Marini 513
Maritain 775
Markley 816
Martin, J. 822
Martin, W. 408, 588
Marty 814
Masso 161
Masters 616
Mayer 116
Mayhew 383,456,476,531,532,734, 746,809,889
McClellan 212, 218
McClelland 59
McCluskey 618
McConnell 419, 894
McCracken 851
McElroy 881
McGrath 427, 430, 457, 725
McHale 666, 834
McLuhan 219, 644
McMurrin 873
Mead 71, 602
Meals 716
Medsker 431
Meise 623
Meranto 865
Mertins 933
Mesthene 819
Meyerson 375
Michael 1, 79
Michaelis 252
Mickelson 657
Miescher 388
Miles, M. 458
Miles, M.B. 732
Miller, A. 823
Miller, H. 308
Miller, R. 730, 731
Miller, S. 91
Minter 390, 406, 459
Molnar 152
Montessori 594
Moore 82
Morison 394, 460
Morphet 31,32,123,221,319,356,709, 726
Morris 485
Morse 222
Moses 598
Muller 36
Muscatine 752
Musgrave 223

Nadel 740
Nagel 899
Neill 224, 225
Nesbitt 226
Newman 377
Nichols 461
Nisbet 412, 680
Nixon 137
Noshko 701

Oettinger, 321, 322
Ong 107
Otten 462
Ozmon 158, 159

Parker 232
Patterson 758
Peccei 835
Pentony 463
Perkins 420
Peterson, A. 153
Peterson, P. 578
Pettit 83
Pfeiffer 718
Phillips 469
Pines, 592, 593
Platt, J. 12, 13
Platt, W. 573, 706
Polak 664
Porter 101
Postman 230, 231, 869
Potter 395
Powledge 233
Pressman 297

Quade 798
Quattlebaum 127

Rafferty 225, 235, 236
Reich 72
Reid 900
Reif 922
Reimer 836
Renfield 852
Repo 237
Reynolds 625
Ribeiro 832
Richmond 143
Rickover 853, 854
Riesman 421, 545
Riessman 612, 799
Riles 293
Robinson, A. 523
Robinson, T. 238
Robison 591
Rochberg 669
Roche 151
Roczak 73
Rogers 139, 140
Rohrlich 48
Rojas 807, 808
Rollins 239
Rosenberg 53
Rossi 649
Rosove 39, 346, 686
Rothman 846
Roucek 838
Rourke 468
Rudman 298
Runkel 486
Russell, B. 771
Russell, J. 788

Sanders 525
Sandow 840, 841
Sanford 401, 887
Sarason 855
Schaefer 926
Schick 627
Schilpp 783
Schrag 240
Schultz 824
Schultze 22
Schwab 474
Schwartz 439
Searles 241
Shane 242
Shapley 827
Sheldon 27
Sherriffs 856
Sherman 244
Shockley 67
Shores 548
Shrimali 156
Shulman 918
Sieber 533
Siegel 56
Silberman, C. 243
Silberman, H. 332, 333
Sizer 179, 307
Smiley 308
Smith, B.L. 424
Smith, B.O. 340
Smith, G. 391
Smith, R. 482
Snow 829
Snyder 475
Southworth 350
Spock 857
Spurr 587
Starrett 766
Stein 416
Steinhart 498
Stent 490
Stinnett 343
Stoddard 782
Stone 339
Street 295
Stretch 847
Stroup 387
Stulman 930
Sunderland 909
Surkin 511
Sutton 88
Sweeney 106

Tanck 583
Tanner 69
Taylor, A. 907
Taylor, H. 147, 256, 414, 415
Taylor, J. 821
Tebbel 638, 660
Terry 862

Thackrey 913
Theobald 16, 605, 817
Thomas 309
Thompson 793
Tickton 245
Tiedt 126
Tobin 574, 656
Toffler 2, 310, 556
Toole 903
Tope 349
Tough 599
Trow 858
Tschirgi 561
Tussman 483
Tyler 17, 873, 887

Umans 246, 253
Usdan 119, 120

Vaccaro 464
Vachon 89
Van Til 345
Venn 58
Voight 628
von Hoffman 74
Voss 760

Wallerstein 465, 466
Walton 585
Ward 582
Ware 38
Wasserman 281
Watson 329, 729
Watts 505
Ways 826
Weaver 667
Webster 702
Wees 859
Wein 81
Weiss 929
Westerhoff 617
Westin 251, 867
Wheeler 76
Whipple 601, 602
Wilcox 542
Wilhelm 673
Wilhelmsen 467
Williams, H. 723
Williams, W. 692
Willingham 429
Wilson 423, 905
Windham 359
Wittlin 639
Wolff 400
Wolfle 792
Wolk 564
Woodring 409
Wrenn 425
Wright 586

Young, M. 99
Young, M.A. 844
Youngblood 643

Ziegler, H. 271
Ziegler, W. 597, 681
Zijderveld 11
Zook 789
Zweig 554

B. Index by Organization

Academy for Educational Development 245, 318, 382, 531, 721, 722, 741, 746-749
Academy of Policital Science 579
Advisory Council on the State Departments of Education 736
Advisory Council on Vocational Education 258
Aerospace Education Foundation 323
Alternatives! 812
American Academy of Arts and Sciences 28, 375
American Association for Higher Education 391, 453
American Association of Collegiate Schools of Business 519
American Association of School Administrators 162
American Association of University Women 764
American Civil Liberties Union 441, 818
American Council on Education 58, 389, 423, 446, 461, 472, 723, 886, 893
American Enterprise Institute for Public Policy Research 452, 651, 856
American Federation of Teachers 763
American Management Association 611
Assembly on University Goals and Governance (AAAS) 375
Association for Educational Data Systems 325

Biological Sciences Curriculum Study 263
Bureau of Applied Social Research (Columbia) 533

California Association of Secondary School Administrators 183
Canadian Conference on Children 201, 202
Carnegie Commission on Educational Television 654
Carnegie Commission on Higher Education 370-374,422,431,436,471,501, 525,532,540,543,564-566,577,587,588,750,912,914,921
Center for Applied Research in Education 270, 720
Center for the Environment and Man, Inc. 844
Center for Integrative Education 907
Center for Policy Research (Columbia) 410, 433
Center for Research and Development in Higher Education (Berkeley) 389, 390, 406, 459, 588, 721, 894
Center for Research and Education in American Liberties (Columbia) 251
Center for Research on Utilization of Scientific Knowledge (ISR, Michigan) 727, 728
Center for the Advanced Study of Educational Administration 733
Center for the Study of Liberal Education for Adults (Boston) 595, 602, 604, 606
Center for the Study of Public Policy (Harvard) 353
Center for Urban Education 44, 648
Central Advisory Council for Education (England) 737
Centro Intercultural de Documentacion (Mexico) 836
Citizens Crusade Against Poverty 297

College Entrance Examination Board 98,381,429,473,571,608,923
Commission on Human Resources and Advanced Education 54
Commission on Instructional Technology 318
Commission on Obscenity and Pornography 260
Commission on Non-Traditional Study (CEEB) 923
Commission on Population Growth and America's Future 815
Commission on Post-Secondary Education in Ontario 380, 891
Commission on Strengthening the Teaching Profession 343
Commission on Tests (CEEB) 98
Commission on the Student in Higher Education 405
Commission on the Year 2000 28
Commission for Independent Colleges and Universities of Pennsylvania 919
Committee for Economic Development 61, 175, 176, 872-875
Commuter Centers Project (Wayne State) 582
Cooperative Planning in State Education Agencies: A 7-State Project 735
Cooperative Project for Educational Development (NEA) 729
Council for Educational Advance (England) 154
Council of Educational Facility Planners 315

Danforth Foundation 867
Designing Education for the Future: An Eight State Project (Denver)
31, 32, 165, 221, 319, 356, 709, 726
Duke University, Committee on Long Range Planning 754

Education and World Affairs 527
Education Commission of the States 120, 121, 698
Educational Facilities Laboratories 310-313,316,538,556,557,624
Educational Policy Research Center at Stanford 14,157,244,309,573,689,816
Educational Policy Research Center at Syracuse 134,598,667,681,682,702,
800,805,806,840,841
ERIC Clearinghouse on Higher Education 906,918

Ford Foundation 867
Foreign Policy Association 863, 864
Foundation for Economic Education 151
Five College Long Range Planning Committee (Mass.) 759

Harvard Program on Technology and Society 819

Improving State Leadership in Education 123
Independent College Funds of America 470
Institute for Social Science Research 361, 362, 567
Institute for the Future 33, 34, 669
Institute of Higher Education (Columbia) 427, 725
Institute of International Education 528
International Cooperation Council 837
International Future Research Conference 29, 30
International Institute for Educational Planning 66, 650,701,703,704

Lemberg Center for the Study of Violence (Brandeis) 438
London University 755

Management Science Center (Wharton School of Finance) 418
Massachusetts Institute of Technology, Special Student-Faculty Committee 751
Midwest Administration Center (Chicago) 172
Montgomery County Student Alliance (Md.) 220

National Academy of Education 125, 368
National Academy of Engineering 496, 497
National Academy of Sciences 502, 584
National Academy of Sciences, Committee on Science and Public Policy 499, 506
National Advisory Commission on Civil Disorders 287
National Assessment of Educational Progress 936
National Association of Secondary Schools 273
National Association for African American Education 542
National Center for Educational Innovation 167
National Commission for the Study of Nursing and Nursing Education 503
National Commission on Technology, Automation, and Economic Progress 35, 317
National Commission on the Causes and Prevention of Violence 434
National Commission on Urban Problems 285
National Conference of Professors of Educational Administration, 1985 Committee 367
National Conference on General Systems Education 266
National Goals Research Staff 21
National Education Association 190,209,296,329,331,341,342,357,428, 719,729,778
National Institute of Mental Health 262
National League of Cities 711
National Observer 186
National Planning Association, Center for Priority Analysis 23, 47
National Program for Voluntary Action 583
National Research Council (NAS) 584
National Science Board, Special Commission of the Social Sciences 507
National Science Foundation 507, 529, 530, 920
National Seminars on Innovation 849
National Society for the Study of Education 191, 291
National Student Association 395, 439, 549
New York State Commission on the Quality, Cost, and Financing of Elementary and Secondary Education 358
New York State Education Department 222, 731
New York Times (Annual Education Review) 135, 136

Ontario Institute for Studies in Education (Toronto) 599, 801
Operation PEP: A statewide Project to Prepare Educational Planners for California 712

Organisation for Economic Co-operation and Development (Paris) 665, 687, 705, 825, 892, 935

Panel of Consultants on Vocational Education 259
Phi Delta Kappa 184, 762
Policy Institute of the Syracuse University Research Corp. 272, 355
Portola Institute 813
President's Commission on Campus Unrest 435
President's Commission on Higher Education (1947) 789
President's Commission on National Goals 21, 23, 24
President's Commission on School Finance 881
President's Committee on Educational Beyond the High School 378
President's Environmental Quality Council 498
President's National Advisory Commission on Rural Poverty 234
President's Science Advisory Committee 562
President's Task Force on Higher Education 376
Program for the Study of the Future in Education, (U. Mass., School of Education) 807, 808
Program in Public Policy for Science and Technology (Indiana) 41
Provincial Committee on Aims and Objectives of Education in the Schools of Ontario 738

RAND Corporation 38, 685
Rice Design Fete IV 316
Russell Sage Foundation 27, 54, 133, 690, 908

San Francisco State College, Center for Technological Education 42
Select Committee on the Future of Private and Independent Education in New York State 379
Social Science Research Council, Committee on Problems and Policy 506
Southern Regional Educational Board 476, 734
Special Committee on Campus Tensions (ACE) 893
Summerhill Society 811
Systems Development Corporation 39,238,326,332,333,334,686

United Methodist Board of Education 904
U.S. Chamber of Commerce, Commission on Trends and Perspectives 245
U.S. Commission on Civil Rights 876
U.S. Congress. House Committee on Education and Labor 247,318,526,860
U.S. Congress. House Committee on Science and Astronautics 105,670,671
U.S. Congress. House Subcommittee on Science, Research, and Development 494
U.S. Congress. Senate Committee on Labor and Public Welfare, Special Subcommitte on Indian Education 248
U.S. Congress. Senate Select Subcommittee on Educational Opportunity 92
U.S. Dept. of Health, Education, and Welfare 25, 128, 369, 879
U.S. Dept. of Labor 62-65, 613
U.S. Office of Education 129-132, 336,484,535,558,580,581,615,652,878

University of California, Berkeley Academic Senate 752
University of Oklahoma 753
University of Oxford, Hebdomadel Council, Commission of Inquiry 756
Urban Coalition 93
Urban Education Task Force 293

Western Interstate Commission for Higher Education 389,406,724
World Institute 930
World Future Society 794

C. Index by Selected Subject

abstract society 11
Adult Basic Education 615
Amish 124
Australia 890

bio-feedback training 924
Birkbeck College (London) 755
black colleges 540-542, 914
black students 80
black studies 523, 585, 586

cable television 655
California 119, 740
Canada 380, 396, 397, 738, 743-45, 890, 900
cassette television 659
cluster colleges 402, 408, 544
College-Level Examination Program (CLEP) 608, 923
Colorado 735
communes 87
communications satellites 657, 658
community colleges 373, 431, 546
computers 37-39, 325, 326, 822, 823
confluent education 842
Connecticut 735
consortiums 759
Constitution for Cultural Revolution 111
correspondence study 925
counseling 761
crib and playpen systems 922
cross-impact matrix 669

Delphi methodology 667, 668, 685
Delphi exercises 33, 34, 37, 500, 645, 877
degree structure 587
departments in universities 884
de-schooling society 114
diplomas 100, 116, 587
dropouts 364
drugs 88, 262

education complex (macro-system) 144, 681
education parks 309, 876
England 186, 229, 737, 756, 890
environmental education 498, 551, 552, 862
experimental schools (see new schools)

Experimental colleges and courses 482-484, 549, 550, 911
external degree programs 923

Florida 119
fourth-level learning 16
France 890, 899
fraud 840
free-access colleges 429
free schools (see new schools)
future shock 2, 242
futures education 402, 516, 517, 777, 807
futures researchers 16, 665, 666, 807, 834

gaming 264, 265
Gandhian thought 155, 156
Georgia 119
"Global Village" 641, 657

Hampshire College 758, 759

Japan 890
junior colleges 373, 431, 546

I Ching 672-674
ignorance growth 826
Illinois 119, 742
India 156, 890
Indian education 248
Indiana 119
informal schooling in England 229, 243
information systems 636
intelligence tests 366, 823
international education 525-528, 863, 864
international diplomas 116
Iowa 735
Italy 899

Kansas 748
Kibbutzim 86
kindergarten 591
knowledge society 3, 10
knowledge priorities 12

learned societies 760
learning force 26, 598, 800, 931
library college 548

macro-system forecasting 682
Maine 747
Marxist forecasting 678
Massachusetts 119
membrane structures (as college facilities) 557
meritocracy 99
Mexican-American education 875, 882
Michigan 119
Milwaukee 749
mini-schools 7
Missouri 741

new careers 612, 879
New Jersey 119
"New Reformation" 7
new schools 224-228, 237, 845-847
New York 119, 222, 358, 379
nongraded schools 192, 239
North Dakota 739

Ohio 119
Open University (England) 609, 610

Pay as you Earn (Yale Plan) 572
Pennsylvania 119
Puerto Rico 735
Planning-Programming-Budgeting System (PPBS) 712, 713
Plowden Report (England) 737
policy sciences education 514, 909
postdoctoral education 584
"Pre-Figurative Culture" 71
privacy invasion in education 823
private vocational schools 927
process-oriented education 250
proposed institutions:
  Career Education Program 137
  Commission for Research, Innovation, and Evaluation in Education 175
  Council of Advisors on Higher Education 371
  Council of the Future 2
  Department of Education (cabinet level) 125
  Department of Education and Manpower 258
  Graduate School of Applied Social Research 506
  Jobs corporations 61
  Learning Corps 258
  National Commission for Children 46, 85
  National Educational Brain Trust 126
  National Foundation for Higher Education 137, 371
  National Institute of Education 137, 318

National Institute of Instructional Technology 318
National Library System 623
National Student Loan Association 137
Neighborhood Centers for Parents and Children 46
National University 553
System of skill exchanges, peer matching, and reference services 113, 114
Town Brain 316
World university 554

Rennsalaer Polytechnic Institute 916
research in education 368, 369, 588
room systems in homes 922
rural education 234
Russia 85, 701, 890

satellites 657, 658
scenarios:
general 33, 500
elementary/secondary education 215, 230, 241, 778
higher education 138, 383, 444, 585
scientific manpower 910
social accounting 931, 932
social indicators 25-27, 506, 688, 689, 932
Soviet Union 85, 701, 890
"Spaceship Earth" 15, 863
Spanish-speaking minorities 875, 882
subprofessionals 879
Sudbury Valley School 228
Summerhill School 224, 225
Sweden 890

teaching assistants 535
technetronic era 831
technology assessment:
general 670, 671
of teaching aids 671
temporary society 4
Texas 119, 735

ultramicrofiche 637, 638
underground newspapers (high school) 220, 274, 868
University of California at Berkeley 483, 752
University of Massachusetts, School of Education 915
University of Oklahoma 753
University of Sussex 757
unprepared society 1
upper division colleges 547
Utah 735

utopias 157-161, 929

value impact forecasting 820
visual culture 642
vouchers 353, 354

West Germany 890, 899
West Virginia 735
World Game 833
world macroproblem 14, 816

Yale Plan (Pay as You Earn) 572
Yugoslavia 892

D. Index of Bibliographies

Axelrod (402) - New models for higher education: about 400 items.
Anderson and Niemi (614) - Adult education for the disadvantaged; 317 items uncategorized and unannotated.
Armytage (929) - Utopian literature; about 500 items in notes.
Baier and Rescher (820) - 300 uncategorized items on technological progress and future studies and 500 categorized items on value theory.
Berman (250) - Process-oriented education in the schools; about 600 items.
Burnett and Badger (489) - Learning climate in liberal arts colleges; about 600 items with brief annotations.
Caldwell (41) - Science, technology, and public policy; 5000 items annotated and categorized.
Coombs (109) - Educational change and planning worldwide; 74 briefly annotated items.
Ferkiss (9) - Technology, social change, and the future; about 900 items.
Ferriss (133) - Indicators of trends in education; about 250 items.
Gittell and Hollander (305) - Urban school administration and the politics of education; about 250 items.
Havelock (728) - Major works on change in education; 39 items annotated and extensively indexed.
Jantsch (665) - Technological forecasting; about 420 annotated items.
Knorr (724) - Long-range planning in higher education; about 150 items including 24 state plans and planning documents.
Kurland and Miller (731) - Change in education; 40 items selected and annotated.
Lawrence (389) - Outputs, goals, and costs of higher education; about 200 items.
Lewis (68) - Manpower planning.
Marien (805) - Essential reading for the future of education; 200 items selected and annotated.
Marien (806) - General futures literature; about 1000 annotated.
Mayhew (809) - Literature of higher education, 1965-1970; about 150 books reviewed.
Mesthene (819) - Technological change; 70 well-annotated items.
Miller and Donovan (712) - PPBS in education; about 1200 items uncategorized and unannotated.
Ohliger (810) - Adult education; 95 well-annotated items including 42 by or about Ivan Illich.
Quattlebaum (127) - Recommendations of 27 commissions and policies advocated by 23 government bodies and 55 private organizations.
Rojas (807) - Future studies syllabus: outlines of 70 courses; future studies directory of 60 organizations and 100 individuals worldwide.
Rojas (808) - General futures literature; about 2000 items categorized but not annotated.
Spencer and Awe (528) - International education; about 4000 items.
Summerhill Society (811) - Free schools.
Terry (862) - Environmental education; 100 annotated items.

Toffler (2) - General futures literature; 359 items.
Webster (702) - International educational planning; about 8000 items categorized and indexed, but not annotated.
Weiss (929) - Utopian literature; 550 items chronologically listed.
Wilcox (542) - The black university; 100 unannotated items.

additional copies available at $5.00 from:

eprc publications
educational policy research center
1206 harrison street
syracuse, new york 13210

make checks payable to: syracuse university research corporation

design center | syracuse university research corporation

247